

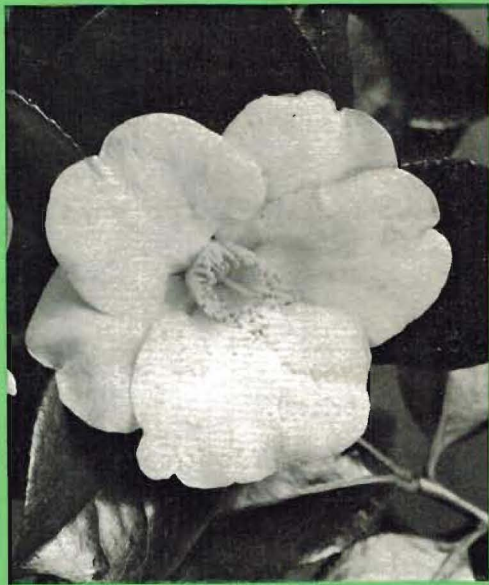
International Camellia Journal

Vol. 1

No. 1

December

1962



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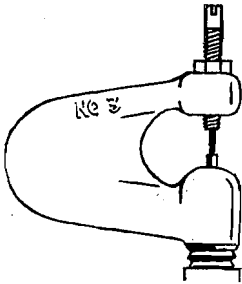
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*International
Camellia Journal*

VOLUME I

*An Official Publication
of the
International Camellia Society*

EDITED BY
CHARLES PUDDLE



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International Camellia Society



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The International Camellia Society has been inaugurated with the following motives :—

- To foster the love of camellias throughout the world and to maintain and increase their popularity.
- To undertake historical, scientific and horticultural research in connection with camellias.
- To co-operate with all national and regional camellia societies and with other horticultural societies.
- To disseminate information concerning camellias by means of bulletins and other publications.
- To encourage a friendly exchange between camellia enthusiasts of all nationalities.

International Camellia Journal

Vol. 1, No. 1

DECEMBER 1962

A Word from the President	...	4	
The Secretary's Page	...	5	
Professor E. G. Waterhouse	<i>President</i> 1962	...	7
Albert Fendig	<i>Vice-President</i> 1962	...	11
Camellia Chronicle	<i>E. G. Waterhouse</i>	...	12
Camellia Names and the International Codes	<i>J. S. L. Gilmour</i>	...	20
Historical Facts on the Camellias of Oporto	<i>Alfredo Moreira da Silva</i>	...	24
Tea Seed and the Tea Industry of Assam	<i>W. Wight</i>	...	29
Border Forest Garden	<i>Andrew C. Soffe</i>	...	32
The Japanese Sazanka and its Relatives	<i>T. J. Savige</i>	...	36
Camellia Test Garden of Cards	<i>Albert Fendig</i>	...	39
Camellia reticulata in New Zealand	<i>T. Durrant</i>	...	41
The Variability of Species in Improvement of Ornamental Plants	<i>John L. Creech</i>	...	45
Old Camellias in Germany	<i>Dr. Wolfgang Körner</i>	...	48
Exhibiting Camellias	<i>C. W. Lattin</i>	...	51
Camellia Culture in Australia	<i>Walter G. Hazlewood</i>	...	57
Why Seal your Grafts?	<i>Stewart C. Forbes</i>	...	61
Painting Camellias	<i>Paul Jones</i>	...	63
Camellias for the Delaware Valley		...	65
Notes to Newcomers	<i>Geoffrey R. Wakefield</i>	...	67
Societies		...	69
Book Reviews		...	70
Current Literature		...	73
By Way of Appreciation	<i>Dorothy W. Newton</i>	...	75

AN OFFICIAL PUBLICATION OF THE INTERNATIONAL
CAMELLIA SOCIETY

A Word from the President

Having been greatly honoured by my appointment by my fellow directors to fill the position of President of the International Camellia Society until such time as there can be a regular election by members according to the Constitution, it gives me very great pleasure to salute fellow members in all parts of the globe and to invite their active participation in the work of the Society.

We already have members in twenty-one countries. We are growing and shall continue to grow. In many of these countries there was no camellia society at all—Africa, Belgium, China, France, Germany, Greece, Holland, Hong Kong, India, Italy, Portugal, Spain, Switzerland, Taiwan and the U.S.S.R. Membership of our society will provide these nations with many contacts with the camellia world, and in the process, many unknown sources of information will be uncovered. The investigation of camellias, past and present has scarcely begun in many countries and Chinese and Japanese literature has much to yield. The camellia check-list now being compiled at the Bailey Hortorium by Mr. Ralph N. Philbrick will contain a mine of information necessarily much compressed. Only those who have been in contact with him over the last five years know how immensely valuable his contribution will be. The Society believes that stability in nomenclature can only be achieved at an international level and by strict adherence to the *International Code of Nomenclature for Cultivated Plants*. The recent appointment of the Society as the International Registration Authority for Camellia is an honour and a great responsibility. The Society will undertake research in many spheres of camellia culture of world-wide interest.

The Society is thus international, both in character and outlook. It will not compete with any existing camellia society in fields which are adequately covered. It will co-operate by directing attention each year to recent camellia literature and to articles of note appearing in horticultural publications. Its aim is to encourage a friendly exchange between camellia enthusiasts of all societies and of all nationalities. I have great faith in the International Camellia Society. The Constitution, prepared after much thought and consultation by Mr. Albert Fendig, will be submitted to members. My closing word on my own and, yes, also on your behalf is an expression of profound appreciation to Mr. Charles Puddle for his able, sagacious and untiring work in launching the Society.

E. G. WATERHOUSE.

The Secretary's Page

Since the inauguration of the Society on April 1st, 1962, many hundreds of enthusiastic letters have been received, welcoming its formation and expressing good wishes for its future success. These have come from all camellia growing countries and have been most encouraging to all connected with the Society.

In presenting the first number of the *International Camellia Journal*, I would like to stress that this is only a beginning. We aim to produce something "different" with an international outlook which will appeal to all our members wherever they may live. Your suggestions and criticism will be welcomed and I hope that many of you will contribute to our future Journals. For articles in this number I have to thank contributors from many lands, and those countries not represented this time will be included in our future issues. I must also thank our advertisers who have so nobly supported the Society.

The highlight of the Society's progress has been its unanimous appointment as the International Registration Authority for the cultivars of *Camellia* at the recent Horticultural Congress held in Brussels. On behalf of the Society I wish to express thanks to the camellia and horticultural societies for their support, to the Bailey Hortorium and to the many others who contributed so greatly to the success of our application. More news of this very important assignment will be given in the next Journal.

All current subscriptions have been extended until September 1st, 1963, in appreciation of the early support given to the Society. The Constitution and By-laws will be published shortly and provide for the appointment of the Board of Directors by the members. Elections on a continental basis will be held as soon as possible. A full list of members will appear in the next issue of the Journal.

We are most grateful to the many camellia and horticultural societies who have so greatly assisted the Society by their co-operation and goodwill. The Society is anxious to establish cordial relations with all organisations interested in the promotion of camellia knowledge and in increasing their popularity. It has no desire to compete with the work of the existing national and regional camellia societies.

The Society's thanks must also go to the camellia and horticultural press for publicity so freely given and to the many members who have made personal recommendations. Our future plans and publications will cover many exciting new fields of camellia knowledge. I hope you will tell your friends about the motives and work of the Society. To all of you I send the Society's greetings and our thanks for your wonderful support.

CHARLES PUDDLE.

International Registration Authority for Camellia

The following is the text of a letter received from Dr. H. R. Fletcher, Secretary of the International Commission for the Nomenclature of Cultivated Plants:—

"I have pleasure in being able to inform you that, at the XVth International Horticultural Congress recently held in Brussels, the International Commission for Horticultural Nomenclature and Registration of the International Society for Horticultural Science unanimously agreed to the appointment of the International Camellia Society as the International Registration Authority for the cultivars of Camellia. Furthermore, this appointment was ratified by the Council of the International Society for Horticultural Science at its final meeting in Brussels."

Subscriptions

All current subscriptions will be due for renewal on September 1st, 1963.

For the convenience of members, the Membership Committee under the chairmanship of Albert Fendig, has appointed the following representatives to whom subscriptions may be paid:—

Africa: Andrew C. Soffe, Murambi House, 1/3 Stortford Avenue, Umtali, Southern Rhodesia.

Australia: H. K. C. Dettmann, 87 Ada Avenue, Wahroonga, New South Wales.

Japan: Tsukasa Kiyono, 29, 170 Nichome, Harajiku, Shibuya, Tokyo.

New Zealand: T. Durrant, Mayhills Farm, Tirau, New Zealand.

U.S.A.:

East Coast: Albert Fendig, First National Bank of Brunswick Building, Brunswick, Georgia.

Gulf Coast: Will P. Fulton, 3604 Greenbriar Drive, Dallas 25, Texas.

West Coast: Vern McCaskill, 25 South Michillinda Avenue, Pasadena, California.

Or subscriptions may be sent direct to:—

Charles Puddle, Bodnant Gardens, Tal-y-Cafn, Colwyn Bay, Denbighshire, United Kingdom.

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Professor E. G. Waterhouse

President, 1962

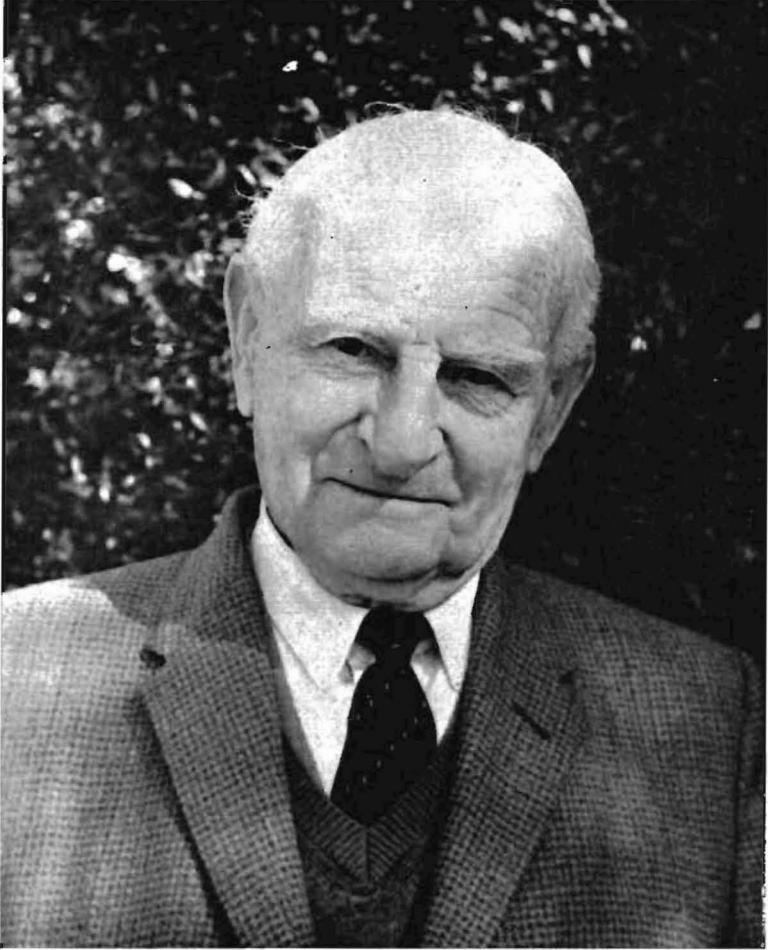
THE unanimous election of Professor Eben Gowrie Waterhouse as foundation President of the International Camellia Society demonstrates the esteem and respect in which he is held by camellia enthusiasts throughout the world, and expresses in some measure their appreciation of what has been virtually a lifetime dedicated to the cause of camellias.

Combined with this are the many years of community service in the fields of education and the fine arts in the course of which he served first as Acting Professor of French, then Associate Professor in German, and finally as Professor of German at the Sydney University, Australia. He is an Officier d'Academie, Cavaliere della Corona d'Italia and in 1958 he received the Gold Medal of the Goethe Institute for his services to the German language. In the Australian 1962 New Year Honours List he was made an Officer of the Most Excellent Order of the British Empire. His public activities have led him to become a Life Governor of the Prince Alfred Hospital in Sydney and to serve for the past twenty-six years on the Board of the National Art Gallery of New South Wales of which, in 1960, he was elected President of the Board of Trustees.

A traveller over most of the globe, particularly where camellias can be found, his trips have embraced many of the old camellia collections in Europe, Japan, Australia, and New Zealand and much of the information obtained on the older cultivars has been published in the journals of the various camellia societies. His two books on camellias, *Camellia Trail* and *Camellia Quest*, the latter now a collectors' item, are world famous and also served to introduce to flower lovers that particularly talented painter of camellias, Paul Jones.

His interest in camellias began relatively early in life and he soon realised that there was considerable confusion in their nomenclature. He thus began the collection of old horticultural literature, illustrations and catalogues, in fact anything that would assist in throwing some light on camellia nomenclature, until today he has accumulated one of the most comprehensive private indexes of information on both the early and later cultivars of camellias. This information has always been made readily available to those genuinely interested in camellia nomenclature and Ralph Philbrick made considerable use of it during his Australian visit whilst collecting information for the Bailey Hortorium checklist of camellia cultivars.

In his considerable research into camellia nomenclature he has developed one of the largest private camellia collections as far as cultivars are concerned in Australia. This collection is particularly interesting due to the number of



Professor E. G. Waterhouse,
President, 1962.

older and lesser known camellias that are included, many of which have been the subject of considerable controversy. Whilst the garden at Gordon is predominantly one of camellias, by the introduction of a decided Chinese motif in a Pavilion and other garden structures, its general layout and the way large trees have been underpruned or positioned for form and balance, as well as the more practical aspect of shade, it has become an inspiration to other garden builders as well as a Mecca for all camellia lovers when visiting Sydney.

Efforts to promote camellias have always had the Professor's full support. Besides being one of those primarily responsible for the formation of the present Australian Camellia Research Society, of which he has been General Secretary * and Editor since its inception, he is an Honorary Life Member of the New Zealand Camellia Society and a member of various other camellia societies in America and Japan.

No branch of camellia interest has been neglected for not only have many worth-while camellia cultivars, both old and new, been brought to light by his efforts, but many of his seedlings have become world famous. Foremost amongst these are his putative *Camellia* x *williamsii* which include 'E. G. Waterhouse,' 'Margaret Waterhouse,' 'Lady Gowrie,' 'Shocking Pink' and 'Crinkles.' His *Camellia japonica* seedlings of note include 'Dainty Maiden,' 'Polar Bear,' and 'Australis' and *C. sasanqua* 'Plantation Pink.'

At all times his activities have been supported and his enthusiasm shared by his charming wife with her impish sense of fun and delightful Scottish brogue. Their lives have been further enriched by a family of four sons, all of whom share their parents' love of flowers and in particular, camellias.

All who know Professor Waterhouse, treasure the friendship of a man who is one of the old school with undeniable charm and erudition; a quiet sense of humour and a lover of beauty in all forms. For all this and much more that can be mentioned we are honoured to have as our first President, Professor E. G. Waterhouse of Australia.

TOM SAVIGE.

* Elected President, August 1962.

Front cover:

'Gertrude Preston', a seedling of the *C. japonica* cultivar known in Britain as 'Apple Blossom' received the Award of Merit of the Royal Horticultural Society in April 1962. It is very free-flowering being clothed with single flowers which are Neyron Rose when fully open but deeper in bud. Of vigorous growth it promises to be an excellent garden camellia and is a credit to the raiser Mrs. G. Preston, Haywards Heath, Sussex, who is a member of the Society. Photo copyright by J. E. Downward.



Albert Fendig
Vice-President, 1962

Albert Fendig

Vice-President, 1962

OUR Vice-President is known to nearly all of us interested in correct camellia names.

For years his spare time has been devoted to improving the system of names for garden camellias. We know his five volume *American Camellia Catalog* (1949-1952), which itemizes more camellia names than any other single publication to date. He is also the author of numerous articles in the periodical literature. All of these works are both methodical and logical, two of Albert Fendig's strongest characteristics.

We often know only the camellia history of our camellia friends; so you may not have known the following: Albert Fendig was born in the coastal city of Brunswick, Georgia, U.S.A., on April 12th, 1906. Twenty-three years later he married Gladys Gowan, also of Brunswick. All but the youngest of the Fendig's four children now have families of their own.

Mr. Fendig was educated in Brunswick schools, then at Glynn Academy, and finally at Harvard. He began his practice as attorney at law in 1930 and is now the senior partner of the firm of Conyers, Fendig, Dickey and Harris of Brunswick. This legal training is undoubtedly responsible for many of the virtues of his camellia nomenclature work and has provided us with the preliminary draft of the By-Laws and Charter by which our Society is now governed.

During the second World War Mr. Fendig served as a Commander in the United States Navy. Now both he and his camellias are just at the water's edge on St. Simons Island, Georgia. His home contains not one, but two, camellia "test gardens," one under giant tillandsia-covered ever-green oaks, and the other in his study where varietal descriptions and histories are checked and re-checked.

We have a Vice-President that we can be proud of.

RALPH N. PHILBRICK

Camellia Chronicle

Notes on a visit to Hong Kong, Japan and Taiwan (Formosa)

E. G. WATERHOUSE

New South Wales

Australia

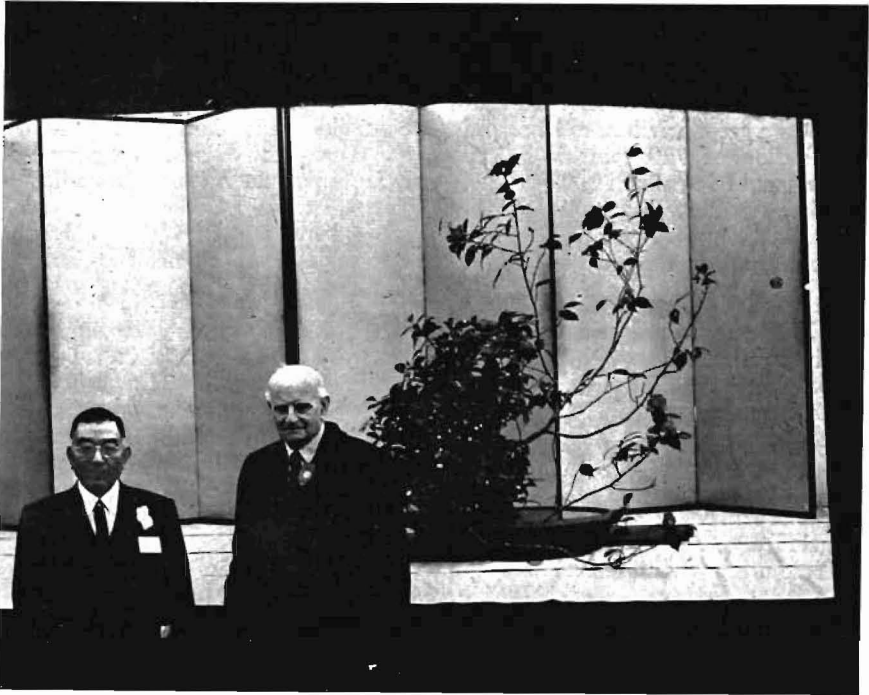
Hong Kong

On March 13th this year my wife and I and my artist friend Paul Jones, flew from Sydney to Hong Kong en route for Japan. It was interesting to see on the island large numbers of *Camellia hongkongensis* growing in the forest where they are indigenous—tall sapling-like trees making their way up to the light, competing with other woodland trees. Unfortunately the flowering season (December-January) was over, but there were seedling *C. hongkongensis* in abundance, growing up beneath their parents, easily recognizable by their smooth, glabrous laurel-like foliage and reddish brown new growth. Another Hong Kong species *C. salicifolia* was also readily recognized from its slender pendulous branches and spreading habit.

The only known plant of the species *C. granthamiana* is in the Hong Kong New Territory on the mainland, growing in partial shade in a wooded ravine at an altitude of 2,000 feet. Herbarium specimens and photographs of this were shown us by Mr. H. C. Tang, of the Gardens Division and Urban Services Department, who conducted us round the island and took us to nurseries where there were pot-grown camellias. These consisted almost exclusively of two cultivars of *C. japonica* called "double white" and "double pink." Mr. Andrew Tse, a nurseryman, told us that these were almost the only cultivars known in Hong Kong and that he could give us no other name for them. The plants seen were not in flower, but the foliage of the "double white" was clearly that of 'Alba Plena,' an old plant of which we found later in the Botanic Gardens bearing its last belated bloom. The foliage of the "double pink" looked to me suspiciously like that of 'Otome' (synonym of 'Frau Minna Seidel') and I began to wonder whether 'Frau Minna Seidel' could have originated in China rather than Japan. I leave this thought for further investigation. Mr. Tse informed me that his camellias came from FA-TI ("Flower Land") in Canton and said that FA-TI was the nursery of Southern China. He also informed me that 'Otome' is found in Yunnan where he had once lived. All attempts to locate Chinese lists or catalogues in Hong Kong failed. The China Trade Corporation, Gloucester Buildings, Hong Kong, which was said to represent the Temple Nurseries of Kunming was visited, but all contact with Kunming had ceased and no records were procurable. My impression was that Hong Kong can have no great future as a camellia growing area on account of its climate and water shortage.

Japan

On arrival in Japan on March 17th we found that the winter had been exceedingly dry. Camellia foliage lacked lustre and the flowering season was unusually late. The few early blooms were damaged by frost and little immediate observation could be undertaken. Mr. Ishikawa, President of the Japan Camellia Society, Mr. Kiyono, Vice-President of the Japan Horticultural Society, and Mr. Satomi called on us and immediately established friendly relations and discussed with us our tentative plans. These three gentlemen showed us the greatest courtesy during our stay.



Professor Waterhouse and Mr. K. Ishikawa, President, Japan Camellia Society, at the International Camellia Carnival

Mr. Satomi took us to the Shinjuku Gyoen National Gardens in Tokyo where we saw the first two early blooms on 'Kumagai' a higo camellia which we were to admire in full flower some weeks later at Kumamoto and in Kyoto. Mr. Satomi informed us that 'Mihata' is a sport of 'Kumagai.' This was of great interest to us as we have plants of 'Mihata' in Australia imported from the Hakoneya Nurseries of Mr. K. Wada. Another camellia seen in flower at Shinjuku was *C. uraku*. This had been confused in Japan with *C. wabiske* until Professor Kitamura, Botanist of Kyoto University determined it as a separate species in 1910. Others regard it as a hybrid closely allied to *C. japonica* and think that *C. saluenensis* may possibly be involved. The former confusion with *C. wabiske* (in its cultivar spelling 'Wabisuke') was

transmitted from Japan with plants sent to Britain, Australia and New Zealand. The true 'Wabisuke' has smaller, trumpet-like flowers as exemplified by 'Kocho-wabisuke,' 'Beni-wabisuke' and 'Shiro-wabisuke.' The oldest known plant of *C. uraku* is in a temple garden at Kyoto, and is upwards of sixteen feet in height and was in full flower at the time of our visit to that city.

Among other camellias seen in flower at Shinjuku were 'Hijirimen,' a bright and attractive rose-form red, 'Yokogawa,' 'Kayoidori' and 'Otome,' a plant at least sixty years old. We saw many 'Otome' during our visit to Japan and this was always the name applied to them. If we suggested 'Usu'otome' it was accepted but the Japanese normally call the camellia 'Otome.' I am referring of course to the cultivar known as 'Frau Minna Seidel' in Europe and as 'Pink Perfection' in America.

As there were so few camellias in flower at this moment it was decided to work in the libraries until more extensive observation became possible. It was a great privilege to be accorded the honour of examining a magnificent collection of 720 camellia paintings, all presumably by the same artist, preserved in an album 200 years old in the Library of the Imperial Household. There were two camellia paintings on each page, mainly singles and semi-doubles, beautiful and somewhat stylized but unnamed. I could not identify any of them with certainty much to my chagrin. What a testimony to the popularity of the camellia in Japan two hundred years ago!

While at the Imperial Library we received a telephone invitation to Mr. Kiyono's home. We found him surrounded by camellia books including a complete set of Verschaffelt's *Nouvelle Iconographie des Camellias*, probably the only one in Japan. Before the war Mr. Kiyono had conducted a highly successful nursery in America, having imported many camellias from Japan. He is now engaged in writing a book on pansies. The camellias in his garden were not in flower but he showed us small plants of several camellia species he had recently imported from Nuccio's Nurseries in America. They included *C. salicifolia*, *C. oleifera*, *C. fraterna* and several *C. x williamsii*. These are as yet little known in Japan.

Next day was spent examining old camellia literature in the Diet Library. One work, *Chinka issoku* written about 150 years ago, described thirty camellias, including 'Tsurikagari.' Another *Honzo zufu* dated 1805-1828, contains 96 volumes with numerous camellias including 'Bokuhan,' 'Karako,' 'Kokinran,' 'Karaito,' 'Tsurikagari,' 'Hanatachibana,' 'Otome,' 'Hagoromo,' 'Kagiri,' and 'Kumasaka'—cultivars still well known today.

The following day Mr. Kiyono took us to call on Mr. Choka Adachi, flower-master and author of the well-known book *Camellia, Its Appreciation and Artistic Arrangement* published in 1960. It had been the impressive colour plates of the higo and snow camellias in this book that had left me with no alternative but to journey to Japan to see these two fascinating groups of camellia. Mr. Adachi, his wife and daughter received us most cordially and insisted on our staying for a Japanese meal. We sat shoeless on low square cushions on the mat-covered floor in front of a table about nine inches high, and were first served with refreshing green tea, placed before us by the ladies with due ceremony. Mrs. Adachi and her daughter Toko charmingly dressed in kimonos, did not sit with us, but at a clap of the hands from the Master brought in each successive dish with great grace and

dignity. Each course was served in a charming container and adorned with a small camellia bloom freshly picked from the garden. It certainly added to our zest for food to enjoy 'Bokuhan' (correct name for 'Tinsie'), 'Shiro-wabisuke,' 'Kocho-wabisuke' and 'Hishikaraito' as floral accompaniments. Meanwhile we enjoyed the simple charm and refinement of a completely Japanese room with its Tokonoma and scroll and simple flower arrangement by Mrs. Adachi of single red camellias in an exquisite container. At the end of a memorable meal our host unrolled before our gaze his wonderful long scroll of *One Hundred Camellias*, first made known to us by the wonderful reproduction of it in colour in his book. His scroll is a good reproduction of an original dating from the year 1635. We next inspected the studio and lecture room where Mr. Adachi, his wife and daughter hold their classes, and saw some of the arrangements that were being made for a camellia festival to be held with the students of the Adachi School.

The time now came to visit the garden with Mr. and Mrs. Adachi and Toko who in her charming kimono and with lustrous black hair adorned by a single white camellia, announced the name in turn of each camellia in the garden. There was 'Okinonami,' 'Hikarugenji,' 'Otome,' 'Akebono,' *C. uraku*, and a most attractive 'Momo'irobokuhan' which was much larger and lighter in colour than 'Bokuhan' but had the same type of flower. There were also various higo and snow camellias (*C. japonica* subsp. *rusticana*) but not yet in flower. By the publication of his book Mr. Adachi has focussed the attention of the world on these two fascinating groups.

It was at the International Camellia Carnival that we first met the Adachis. This imposing function, sponsored by the Japan Camellia Society was held at the Chinzan-so (Camellia Villa) in Tokyo on Saturday, March 24th. Chinzan-so is famous for its restaurant and for its extensive and beautifully landscaped grounds. We were the guests of Mr. Ishikawa, President of the



Mr. Choka Adachi

Japan Camellia Society, who received us at the entrance in front of which stood three colourful and charming Oshima-Anko, that is, girls from the island of Oshima noted for its woods of single camellias that produce seeds in great abundance which are collected by the girls. Oil is extracted from the seeds and is used for cooking and for the hair. In their picturesque costumes and wearing attractive caps, blue below and white on top, and with a single red stencilled camellia emblem centred in the front, the girls stood behind trays laden with artificial camellias, single white, single red and single pink. Everyone who entered had to wear a camellia emblem. The Officials wore white, the Diplomatic Corps (in which we were courteously included) red, and the general public pink. Thus bedecked we entered and proceeded down a wide covered walk hung on one side from ground to roof with



Oshima Girl distributing
camellia emblems

coloured cloth bearing stencilled camellia blooms here and there. Along the other side was a bench on which were displayed a limited number of non-competitive exhibits of camellia blooms and foliage in bottles covered with alfoil. Blooms were named in English as well as Japanese. The quality of the blooms was not remarkable, due to the long, dry winter and retarded season. At the end of the walk there was a wide platform with three effective flower arrangements done by Miss Adachi.

We then went out into the open where diplomatic representatives were received and introduced. Here, too, we met the Adachis and various nurserymen including Mr. Minagawa and Mr. Nakamura. A ceremony was then held in the presence of the audience seated in front of the steps which led up to a platform at the back of which hung coloured cloth stencilled with bold camellia emblems. Mr. Ishikawa presided and announced the formation of the International Camellia Society about to take effect as from April 1st, 1962, and asked myself as President-elect to address the meeting which gave me the opportunity of outlining the aims of the Society. Camellia plants

were then presented by the Governor of Tokyo to the Mayor of Mexico City and suitably acknowledged, following which camellia seedlings were presented to the Diplomatic Representatives present at the Carnival. Thereupon as an international gesture, Mr. Ishikawa invited me to join with him in planting and watering an eight-foot high camellia 'Okino'ishi' in a hole prepared in advance. Following this the Ambassadors of Ghana, Canada, and Peru planted a camellia as representatives of the Diplomatic Corps. The whole ceremony was broadcast and televised.

The Tokyo Camellia Show which was held in a city department store for three successive days the following week was also organised by the Japan Camellia Society. The show was non-competitive and there was no official opening. The flowers on small branches of foliage, were placed in glass tumblers in tiers along one side of the store, the straight line being broken by two recessed bays. On a wall with light background behind the exhibits there were framed reproductions of camellia paintings by Paul Jones taken from Mrs. Urquhart's book *The Camellia*. In addition there were four original camellia paintings by Paul Jones loaned by him for the duration of the show.

The exhibits were labelled only in Japanese and consisted entirely of Japanese cultivars. There were a few higo camellias, 'Yamato-nishiki' being particularly attractive. The blooms of 'Akebono' were extremely beautiful and this camellia is deservedly popular in Japan and was frequently encountered. It is a flesh coloured semi-double but Chugai Nursery 1937, listed it as single, and McIlhenny who imported from them repeated that description. 'Akebono' as seen in Japan is always semi-double. Another firm favourite is 'Okinonami.' The quality of the few snow camellias shown did not impress, and in general, blooms had suffered markedly from the unfavourable weather conditions which preceded the show. All along the opposite wall, the exhibits, large "balled" camellia plants eight to ten feet in height were labelled and priced. They had been supplied by nurserymen and we saw many of these plants being sold and wheeled away.

To me the show was of great importance from the nomenclature point of view. 'Arejishi' was there showing white mottlings, which agrees with Satomi's description in *Camellia Varieties in Japan*, 1956. I believe much earlier listings give it as self-coloured which would correspond to Satomi's 'Beniarejishi.' This would become a synonym and not the valid name if 'Arejishi' is established for the self-red form, and in that case the mottled form would be 'Arejishi Variegated.' The origin of 'Arejishi' is worthy of investigation. Is it a garden form of the snow camellia (*C. rusticana*)? Its young foliage has hair on the petioles, one of the characteristics of the subspecies *rusticana*. At Kamo in the snow camellia area we saw near a shrine, a large old tree of 'Arejishi' and another at a farm some three or four miles away. They were growing in a district where all the camellias were garden forms of *C. rusticana*.

'Kocho-wabisuke' as shown at Tokyo and as seen frequently later especially in Kyoto, is the name applied to a very small single trumpet-shaped bicoloured bloom, red with white dots or flakes. Many examples of this are to be seen in the temple gardens in Kyoto, the most famous being the 360 year old specimen, twenty-six feet in height growing in the garden of the Buddhist temple, Soken-in Daitokuji. This tree is extremely floriferous and

countless blooms on the plant had aborted stamens, but a sucker that had sprouted from its root bore flowers with a small cylinder of stamens. The self-coloured form of this camellia reached Australia under the name of 'Kocho-wabisuke.' Would not this then be 'Beni-wabisuke,' seeing that 'Kocho-wabisuke' is a bicolor? As regards pronunciation I always heard it as "wabiske" and not as "wabisuke" though the latter spelling is often met with in the records.

'Shiro-wabisuke' is a beautiful pure white form, of similar size and trumpet shape except that the petals open more widely. It seems to be much rarer but there is an old tree of it twenty-eight feet high in the front garden of the Buddhist Nunnery, Rinkiuji in Kyoto.



'Shiro-wabisuke'

'Yae-wabisuke' was the name given to me at the Tokyo Camellia Show for a double camellia with small blooms somewhat resembling *C. hiemalis* 'Shishigashira' and with rather sasanqua-like foliage. I found the same camellia growing in the Takarazuka Botanic Gardens under the name of 'Kanzaki-wabisuke.' It was sent to Australia under the name of *C. reticulata* 'Wabisuke,' and more information on this nomenclature is desirable. Can any listing of it be cited? The whole wabisuke group needs further study. Dr. Kitamura told me that he thought 'Wabisuke' might be a hybrid between *C. sinensis* and *C. japonica*.

The *C.* 'Wakanoura' exhibit caused me surprise. I thought this would prove to be what I have always known in Australia as *C.* 'Tricolor.' But this was not the case. 'Wakanoura' is a much less striking camellia. A comparison was immediately available further along the show-bench where good blooms of 'Ezo-nishiki' were identical with 'Tricolor' in every respect. I subsequently checked the identification on many flowering plants of 'Ezo-nishiki' and my conclusion was always the same. There were on the plants the identical red, variegated and white sports that occur on our plants of 'Tricolor' in Australia. I am of the opinion that 'Tricolor' as shown in the colour plate in *Floricultural Magazine* Vol. 4, p.229, 1839, seven years

after Siebold introduced the camellia to Europe, is the very old and well-known Japanese cultivar 'Ezo-nishiki' and that is distinct from 'Wakanoura' as known in Japan.

'Momo'irobokuhan,' an attractive camellia, was quite new to me. It has the same form as 'Bokuhan' but is much larger and the petals are light pink in colour. Can anyone supply information on the origin of this cultivar or point to any published record?

After the Tokyo Camellia Show, Mr. Ishikawa invited us to visit his garden which is so full of camellias that he has no room for any more. We admired his tall plant of 'Moshio' in full bloom—a gorgeous spectacle. At last the camellia flowering season had begun. Lovely 'Akebono' was at its best. Of special interest was the rare and unusual 'Fukurinikyuu,' a small single bloom, white spotted pink and leaves edged yellow and without serrations. Then there was 'Showa-wabisuke' known as such also at the Takarazuku Botanic Gardens and at the Botanen Nurseries. However Satomi 1956 gives priority to the name 'Setchuka'⁽¹⁾ for this camellia. Can the evidence for this priority be given? The answer is important for in Australia this camellia has been known as 'Little Princess' and in America as 'Apple Blossom' and the original Japanese name has long been sought.

'Yukimiguruma' is another camellia which needed a visit to Japan to settle its identity. I checked plants under the name time after time wherever we went in Japan and I am convinced that what we have in Australia is 'Kamohonami' and not 'Yukimiguruma.' Both are well known in Japan and were often met with. 'Yukimiguruma' is a smaller and flatter bloom and its foliage is quite distinct. I know the identification of 'Kamohonami' will come as a surprise to many as it did to myself but I found it inescapable.

This chronicle will be continued in the next issue of the *International Camellia Journal*. Meanwhile correspondence and criticism in regard to nomenclature and other details will be welcomed.

(1) Mr. Satomi informs me that the name 'Sebbhuka' on page 11 of his *Camellia Varieties in Japan* is a mis-print for 'Setchuka' and that the description he gave should be corrected as follows: "White shaded light pink, small, semi-double, having a sweet smell, E—M." He adds 'Hatsukari' is often used in the Tokyo district for 'Setchuka.'

George Du Brul, 3431 Lovers Lane, Dallas 25, Texas, U.S.A., writes: "I would be interested in exchanging color slides of camellia gardens with members in various parts of the world. I can duplicate color slides of camellia gardens in the Gulf Coast and South Atlantic Coast areas which, probably, will be of interest to other members overseas. Also I can duplicate most of the newer varieties."

Mr. Du Brul is State Director for Texas of the American Camellia Society.

Camellia Names and the International Codes

J. S. L. GILMOUR

Cambridge

United Kingdom

IN the first place, it is essential to distinguish between (a) *botanical* names, in Latin form, of *wild* species and varieties, and (b) *cultivar* names of plants which have originated—or are maintained—in cultivation and which are not normally given botanical names (though some cultivar names may be in Latin form, as explained later). These two types of name are governed by two quite different International Codes of Nomenclature. The names of wild species (e.g. *Camellia saluenensis*) are governed by the *International Code of Botanical Nomenclature*, for which successive International Botanical Congresses are responsible, while cultivar names (e.g. 'Gloire de Nantes,' 'Nagasaki,' 'Imbricata Alba') are governed by the *International Code of Nomenclature for Cultivated Plants* produced by the International Commission for the Nomenclature of Cultivated Plants. The latest (1961) edition of the *Botanical Code* can be obtained from I.B.P.T., 106 Lange Nieuwstraat, Utrecht, Holland, and of the *Cultivated Code* (1961) from the American Horticultural Council and the Royal Horticultural Society in addition to I.B.P.T.

Those concerned with growing and raising garden camellias need not worry greatly about the *Botanical Code*. The number of species grown is not large and their names are, fortunately, reasonably stable and generally agreed (for a discussion of the causes of instability in botanical names, and on the *Botanical Code* in general, see "A Decade of Nomenclature," by the present writer, in the *Alpine Garden Society's Quart. Bulletin*, March, 1961).

An understanding of the *Cultivated Code*, however, is very important for camellia growers and raisers, more especially because there are few genera of woody garden plants which have a longer or more tangled nomenclature history. Cultivar names of garden plants have for many years been, in theory, subject to an *International Code* but, until recently, the *Code* was virtually unknown, and it was not until 1953 that a widely circulated *Code* became available. This has since been twice revised (in 1958 and 1961). The *Code* published in 1953 was really a combined effort of the International Botanical Congress held at Stockholm in 1950 and the International Horticultural Congress held in London in 1952. Though entitled "for Cultivated Plants," it was drawn up primarily with *horticultural* plants in mind, and it soon became clear that several modifications would have to be made if it was to be equally serviceable to agriculturists and foresters. Accordingly, a special International Commission for the Nomenclature of Cultivated Plants was

established under the International Union of Biological Sciences, and this Commission set to work to re-formulate the *Code* so that it would apply satisfactorily to *all* cultivated plants. The full history of the work of the Commission is set out in the Prefaces to the 1958 and 1961 editions of the *Code*, together with the names of the agriculturists, horticulturists, foresters and botanists responsible.

I would strongly advise all those interested in camellias to obtain and read the *Code*, especially those concerned with the raising and naming of new hybrids and cultivars, but it may be useful to give the following brief summary of its main provisions:—

1. The *Code* defines a cultivar or cultivated variety as "an assemblage of cultivated individuals which are distinguished by any characters (morphological, physiological, cytological, chemical, or others) significant for the purposes of agriculture, forestry, or horticulture, and which, when reproduced (sexually or asexually), retain their distinguishing features." It recommends the use of the international word cultivar, but allows, of course, for the use of other terms normally employed as equivalents in various languages (e.g. Variety in English, Sorte in German, etc.). Cultivars are usually forms produced in cultivation by selection, sporting, or hybridization, but the term is also applied to forms collected in the wild which are of special interest to horticulturists or others, but which are usually not "important" enough botanically to be separated by botanists and given a Latin name in a botanical category such as variety or form. Occasionally, however, a particular plant may be designated as, say, a form by botanists and as a cultivar by horticulturists, and there is nothing in principle against such a procedure.

2. The various different *kinds* of cultivars are set out and defined (i.e. clones; lines; assemblages of individuals showing genetical differences but united by one or more characteristics differentiating them from other cultivars; and F₁ hybrids of the type now common in maize and other crops).

3. The category "strain" is not adopted in the *Code*; any selection showing sufficient differences from a parent cultivar to render it worthy of a name is regarded as a distinct cultivar.

4. It is recommended that, in future, all new cultivar names should be "fancy names," that is, names markedly different from botanical names in Latin form, so as to distinguish them from the names of botanical varieties. However, existing cultivar names in Latin form are not to be altered.

5. Various rules are set out governing the choice of new cultivar names. For example, they should preferably consist of only one or two words, and must not consist of more than three; words that are excessively long or difficult to pronounce in other languages should be avoided, and there are many other similar common-sense provisions.

6. Names may, of course, be in any language, and there are regulations for transliteration and translation into other alphabets and languages. Where a cultivar name, even though transliterated or translated, is "not commercially acceptable" in other countries, it may be changed and a "commercial synonym" substituted, provided the synonym is approved by the originator of the cultivar and by the Registration Authority concerned (see para. 11 below).

7. For cases where two or more names have been given to a single cultivar, rules are laid down for choosing the correct name. These are, broadly speaking, based on priority of publication, but exceptions are allowed when strict application would lead to the changing of widely used names. Where an International Registration Authority exists (see para. 11 below), it is one of its duties to approve such exceptions to strict priority and to judge whether a later (and therefore incorrect) name is in wide enough use (see Article 31 of the *Code*) to justify its retention. This will often be a difficult task, but, broadly speaking, the use of the later, as opposed to the earlier, name should be *international*, rather than confined to one or two areas.

8. Rules are provided for the description of cultivars and the publication of cultivar names. Any language may be employed for the description, but the use of English, French, German, Russian, or Spanish is strongly recommended.

9. The method of *writing* cultivar names is fully dealt with. All names (including Latin names) should be written with capitals, unless the custom of the language concerned dictates otherwise. When printing a cultivar name "in full," it should follow the botanical (or common) name of the species or hybrid concerned and should be distinguished typographically from it, preferably by printing the botanical name in italics and the cultivar name in roman type and by enclosing the cultivar name in single quotation marks, e.g. *Camellia japonica* 'Lady de Saumarez'.

10. Full regulations are included for the naming of hybrids produced in cultivation, and their cultivars. It is here that the *Botanical* and the *Cultivated Codes* overlap, as both artificially produced and naturally occurring hybrids can be given Latin epithets, but there are a number of provisions that apply only to hybrids raised in cultivation. Very briefly, every such hybrid has three parts to its full name, i.e. a generic name (e.g. *Camellia*), a formula (e.g. *japonica* x *saluenensis*), or a collective epithet (e.g. x *williamsii*) and a cultivar name indicating the particular form of the cross concerned (e.g. 'Francis Hanger'). The same collective epithet should normally be used for *all* hybrids between the same species; it can take the form either of a Latin epithet preceded by a multiplication-sign (e.g. x *williamsii*), or of a vernacular word or phrase (e.g. Bellingham Hybrids).

The cultivar name of a hybrid follows the same rules as all other cultivar names; it is important to note that even if there is only *one* form of a particular hybrid known, it should be given a cultivar name, as well as a collective epithet or formula, as soon as it is put into circulation, otherwise there will be no means of distinguishing it from any later forms of the same cross that may appear. There are several other refinements for the naming of hybrids set out in the *Code*, but the above are the main, basic provisions.

11. One of the most important sections of the *Code* deals with the establishment of Registration Authorities for the main groups of cultivated plants. The primary function of these authorities is to register the names of new cultivars in their groups, in much the same way as the names of race horses or pedigree dogs are registered, thus preventing duplication and ensuring that names are in accordance with the *Code*; but the authorities are also responsible for publishing basic lists of all the cultivar names in their group (to be brought up to date from time to time), approving

commercial synonyms and names retained against the rule of priority, and, in general, for acting as a central clearing house and "advisory bureau" for the cultivars with which they are concerned. The *Code* recognizes that the testing or trial of cultivars is of the greatest importance and should, when possible, be carried out before a name is accepted for registration, but it emphasises that registration of names is, nevertheless, independent of testing.

The aim is to establish one International Registration Authority for each group, but either as a stage towards this, or, in the bigger groups, perhaps in addition to the International Authority, National Authorities may also be desirable. For horticultural plants, International Registration Authorities are appointed by the recently formed International Society for Horticultural Science, and National Authorities by agreement between those concerned. A number of International Authorities have already been appointed, and a list of those is given in the 1961 edition of the *Code*.

Much excellent and painstaking research work has been done in recent years on the cultivar names of camellias—especially by Professor E. G. Waterhouse, Dr. H. Harold Hume, Dr. Takeshi Watanabe, Albert Fendig, Austin Griffiths, Jr., Walter G. Hazlewood, William Hertrich, Ralph N. Philbrick, Charles Puddle, Eikichi Satomi, T. J. Savige, William E. Woodroof, and the late R. J. Wilmot—and it is hoped that in the near future, an International Registration Authority for the genus will be appointed⁽¹⁾ so that the information that has been gathered can be embodied in a check list, and a mechanism be available for the registration of new names on an international basis, and in accordance with the *Cultivated Code*.

(1) At the 1962 Horticultural Congress held in Brussels, the International Camellia Society was appointed the International Registration Authority for Camellia.

Miss Claudia Lea Phelps, P.O. Box 344, Bar Harbor, Maine, U.S.A., writes: "I think the International Camellia Society will be a most interesting and valuable 'medium of exchange' for ideas, experience and information. I am sure you will be interested in this illustration of the power of the camellia. I was sitting on a rock in Greece, watching a sheepdog doing a fine job of rounding up his flock over stone walls and on steep slopes. A lady asked if she could share the rock. In the course of conversation she said she was from Australia and her only disappointment was that she feared she would not see any camellias, that she was one of the fantastically growing clan of camellia addicts in Australia and what was my name. When I told her, she asked if it were I who had written those 'invaluable' articles in the G.C.A. Bulletin. I told her—no, my mother had, and she said she thought the 'monograph' mother did years ago on camellias was so good. Don't you think that's an extraordinary coincidence—to find someone in Australia who had read, and remembered, G.C.A. bulletins, so many years ago, and I can't imagine where she saw the little 'monograph.' I think her name is Mrs. T. Felconer Heale, of Melbourne." (Perhaps Mrs. Heale will contact Miss Phelps and the Society.—Ed.)

Historical Facts on the Camellias of Oporto

ALFREDO MOREIRA DA SILVA

Oporto

Portugal

EDITOR'S NOTE: This article is presented as another opinion concerning the age of the old specimens of *C. japonica* growing in the garden of the Conde de Campo Bello at Oporto, Portugal. Following a visit to Portugal in 1957, Dr. Frederick G. Meyer, Crops Research Service, United States Department of Agriculture, Beltsville, Maryland, writing in *Plant Explorations* (published October 1959 by the U.S. Department of Agriculture) stated, evidence indicated that these specimens were the oldest in Europe, having been planted about the middle of the 16th century. Subsequently, there appeared in the *Camellian* March 1960, (published by Frank Griffin & Son, 25-33, Arcade Building, Columbia, South Carolina) an article entitled "An Astounding Revelation, Camellia History Changed" based it is stated on Dr. Meyer's original report and on information supplied by Mr. Joaquim Moreira da Silva. This is the article referred to by Mr. Alfredo Moreira da Silva. Most camellia historians give the date of the earliest European introduction as "about 1739," when records show that *C. japonica* was grown by Lord Petre in England.

UNDER the heading "An Astounding Revelation, Camellia History Changed" some statements have been made which caused me to investigate and present the following clarification.

As will be seen, my opinion on the subject is the same as that held by ancient camellia historians, namely that the camellia was first introduced into England in 1739 and did not reach Portugal until between 1800 and 1810 when it was brought by the English port wine traders.

These men came with their families to live on both sides of the Douro River in Oporto. Knowing how strong and acid was the soil in Oporto and the mildness of the climate, they wanted to experiment with growing camellias. Thus they brought this plant to Oporto from England where it had been cultivated in greenhouses for nearly a century.

There was in Portugal, as nearly all over the world where the camellia plant could be adapted, a real passion for its cultivation. Almost everybody would plant dozens or hundreds of camellias according to his finances and amount of ground. In Portugal the "golden age" of the camellia was between 1800 and 1900, and this passion for the camellia was developed by José Marques Loureiro who, from 1850 to 1895, brought to our notice the old and new varieties, and in his *Jornal de Horticultura Prática*, he and his numerous and distinguished collaborators taught us better ways to reproduce, adapt, and cultivate camellias.

In the *Jornal de Horticultura Prática*, volume 13, on page 106 and following, in the year 1882, José Marques Loureiro wrote an account of the camellia introduction. A translation follows:

A native of Japan and cultivated there and in China since early times, the camellia was introduced into Europe in 1739 but it was only at the beginning of this [19th] century when the beautiful varieties of double flowers and various colours which we admire so much today were obtained, that this plant gained a reputation which has never diminished.....

The first camellias that came to Oporto in 1800 to 1810 were ordered by Mr. Van-Zeller and other well-known amateurs, some of whom then occupied high positions in the Custom-House of Oporto. They were Messrs. Silvestre, of Santa Catharina Street; José Vicenté, of Vilar Street; and Bento Gomes, of Carregal Circus.

We can still see today in the places that we have mentioned above some of these original camellias such as the 'Peonia' in the garden that belonged to José Vicente, with a trunk higher than 16 meters and a very wide dome-shaped top of enormous circumference; the 'Pomponia Alba'; the 'Pomponia Rosea'; the 'Anemona Cadente'; the 'Rajada' or 'Almiscarada' today known by the name of 'Variegata' and, finally, the 'Myrtifolia Chineza' and 'Alba Plena' which are the only ones of the old kind that we still cultivate as they are indeed outstanding.

From the camellias 'Pomponia Alba,' 'Pomponia Rosea' and 'Variegata' came the first seedlings ever to be grown in Oporto, and it was on the property of Fiães, the Vila Nova de Gaia, belonging to Mr. Van-Zeller, that the first seedling varieties were obtained. To be sure, they were at first of no great beauty; later they improved, and later still some became famous.

In the meantime the foundations were laid to bring the plant up to the perfection that we have today. And so from the gardens of Messrs. Pamplona, today Conde de Rezende; Warsemayer, from Massarellos; Allen, from Restauração, the nursery of Virtudes, etc., came successively numerous varieties, some of which are of recognized merit.

In 1844 there appeared the 'Bela Portuense,' the 'Anagua de Venus,' the 'Picturata Plena Portuensis,' still cultivated today. The 'Picturata Plena Portuensis' was the first to grow on the property of Fiães, and the 'Bela Portuense' was obtained by Padre Manoel Silvestre, dedicated amateur of plants who later did a good business in the cultivation of camellias.

As seedlings were being cultivated in Oporto and new varieties were obtained, the amateurs asked for those which were appearing in markets abroad. In this way the camellia 'Smithy,' then called 'Rajada Fina,' was introduced in this city; the 'Stenano' which is called 'Conde de Farrobo' but the real name of which is called 'Leana Superba'; the 'Sweetiana' known by the name of 'Anagua Ingleza.' All of these were imported from England by Mr. Antonio Ferreira Pinto Basto.

In 1846 there began to appear many first class varieties, introduced by Mr. Belens, great amateur of plants who, at that time, lived in Massarellos. Among these the variety that attracted the greatest attention of amateurs and which is still much sought after today was the 'Collettii Vera,' then called 'Conde de Paris'....

On page 136, volume 10, in the year 1879, Conselheiro Antonia de Camillo Aureliano tells us in the same *Jornal de Horticultura Prática*:

I had a friend who has passed away, for whom I mourn every day. Seldom a week passed that he didn't come to see me. He came into my garden as if it were his own; if he found me there hours would pass in happy talks on agriculture and horticulture; if he didn't find me when I returned I would find my bushes covered here and there with visiting cards on which I read:

Roberto Van-Zeller

What delightful days we spent with him, my family and I together with other relatives of mine on his property of Fiães, where the famous soup made with lard, cooked by the greatly valued manager, never failed to appear for dinner!

On page 120, volume 2, in the same *Jornal de Horticultura Prática*, in the year 1871, José Duarte de Oliveira makes it clearer to us as follows:

Glancing at the prosperous state of this species in our country we can't help congratulating ourselves because there are already several hundred different varieties cultivated. Though most of them are of foreign origin, many were sown in Portugal, and so we may consider them Portuguese.

These are for the most part the sowings made in Oporto and its suburbs by those who are passionately fond of this beautiful species. Amongst the most fortunate we must mention Messrs. Roberto Van-Zeller, the Visconde de Villar Allen, Conselheiro Camillo Aureliano da Silva e Sousa, and José Marques Loureiro. The last mentioned name should perhaps be put first, but we have purposely left it till the end so that we can devote two lines of praise, because in this particular case, as in many others, he has rendered very real service to the agriculture. A wholehearted amateur, endowed with an unquenchable love for camellias, he has devoted himself for a very long time to their cultivation and little by little has made a collection of all kinds so that today he unquestionably possesses the best collection in Portugal. To obtain these results he not only imported annually a specified number of them, but organized large quantities of sowings from which he always got the most magnificent varieties, and from those originated a great number of the Portuguese camellias that today adorn our gardens and that many people believe to be from abroad. Etc., etc.

In a catalogue without date (but which we think must have been issued in 1884), that we have before us, the great amateur, cultivator, and trader of camellias, José Marques Loureiro, presents for sale a collection of 868 varieties of camellias.

Why, in this half century, from 1850 to 1900, the "golden age of the camellia," when all the well-known families in Oporto, Vila Nova de Gaia, and some of the greatest names in the Provinces met together at the camellia shows to talk about camellias, did no one oppose what had been written or what had been said?

On these occasions the Count of Campo Belo and the Count of Monfalim were in agreement with the writings and conversations of the time—much easier to refute then than now. All these gentlemen, and many others, upheld and collaborated with José Marques Loureiro, Camillo Aureliano, and José

Duarte de Oliveira, the latter of real and proved worth as much abroad as in his own country. The first camellias brought to Europe may in fact be found in Portugal, but the above do not verify such an assumption.

It has been currently claimed that in 1558 the Portuguese explorer, Fernão Mendes Pinto, and Saint Francisco Javier brought many plants, including camellias, from Japan to Portugal. These plants are said to have been brought to the parents of Saint Francisco and planted at Montemor-o-Novo. However, the actual facts are these:—Saint Francisco was born in his parents' castle of Javier, Navarra, Spain. In the year 1542 he came to Portugal to ask the King of Portugal for permission to go to the parts of India recently conquered by the Portuguese and convert the people to Christianity. He died there in the year 1552. It is impossible to believe that Fernão Mendes Pinto could have, in 1558, brought the plants to the parents of Saint Francisco Javier if they had never lived in Montemor-o-Novo.

Was it the unusual size of these camellias at Campo Belo that induced Dr. Meyer to believe that the plants were the first camellias ever brought to Europe, or was it something else based on irrefutable and concrete evidence? On this point, Mendonca Falção, in the *Jornal de Horticultura Prática*, volume 3, in 1872 tells us:

In Portugal the introduction of the camellia into the provinces was at the end of the first quarter of this century and little more than twenty years since the propagation of the double varieties was begun, and perhaps only twelve years since serious attention had been given to its cultivation.

All foreign writers who are interested in the camellia proclaim Italy, and especially Naples, to be the country best suited to the cultivation of the camellia in the open air in Europe, and never fail to quote as a proof the celebrated camellia (simple) planted in 1760 in the gardens of Caserta, belonging to the King of Naples. They don't hesitate even to call it the oldest of the camellias because of its age and size and because from it are descended the sowings of nearly all the camellias in Europe.

All amateurs of this species who visit Italy are invited to go and admire that enormous leafy tree that can glory in having shaded the first great botanists and horticulturists of Europe who have visited it . . .

The camellia lives in the open air almost all along the Atlantic Coast and French Mediterranean and in some privileged parts in the interior, such as Angers, the Loire Valley, the heart of the garden of France. Lake Maggiore, Piedmont, Florence, Rome, Venice, and especially Naples don't require winter coverings for the camellia because of their nearness to the sea. In Portugal it lives well in the open air almost everywhere, on the coast as well as in the interior in the provinces of the north, and if it doesn't thrive equally well in the south, in my opinion this can be attributed to the excessive heat in summer in some places, and to the natural calcareous soil and the water with which it is watered. Even there when in fresh, airy, and suitable ground, it lives luxuriously as in Cintra—neglected, uncared for, without being cultivated, and spreads in the woods of the Royal Palace at Penna as in its primitive state in its native country.

The botanists state the absolute necessities for the acclimatization of plants as: (1) The plant will grow in the open air to the same dimensions and luxuriance as in its native land; (2) it will produce fertile fruit and seed; (3) it will grow up naturally from the seeds that fall to the ground;

(4) it will give flower and fruit as quickly as in its native land, etc. I think my purpose has been proven and shows that all these conditions suit the camellia grown in Portugal to a much greater degree than in the other countries of Europe and help it to attain greater dimensions than in its natal country. Therefore, the fertility in our country is one more proof, among many, to add to those given it by our poet when he says:

“O pomo que da Pátria Persia veio,
Melhor tornado em terreno alheio.”

“The fruit that comes from its native Persia
becomes better in a foreign ground.”

First condition for acclimatization: If in Caserta the single camellia planted in 1760 (112 years ago) has already reached 10 meters in height, I can, together with many others, mention a fact that I have in my country that completely annuls the singularity of the shrub in Naples.

My neighbour and good friend the Rev. Bernardino Correia de Barros has for 20 years cultivated a lovely garden of camellias in which he specialized, in Folgosa, in the district of Castro Daire, where he lives. And it can be said, in honour of this unwearying and clever amateur that he cultivates the camellia with incomparable care, solicitude, and perfection, especially in training the infinitely varied forms that he knows so well how to produce.

I think I may even say without fear of being contradicted that his garden possesses the most beautiful specimens that perhaps there are in the country.

Actually, camellias can be seen there trained like the *Cupressus fastigiata* with an irreproachable straightness and regularity, which have shot up to a height of 7 meters from the ground.

In confirmation of these facts we have the camellias planted by my grand-father Alfredo Moreira da Silva between 1897 and 1899 in the garden of Dona Jane Andressen which is now the botanical garden of Oporto. These camellias after 60 years have grown into thick hedges with a height of 4 meters and stems of one-fourth meter in diameter, in spite of being pruned regularly. If they had been allowed to grow uninterrupted with unlimited space, what dimensions would they have today?

In 1920 I saw my grand-father plant a small camellia 'Magnoliaeflora' (Syn. 'Hagoromo') in our nurseries at Campanhã, Oporto, and this same camellia, in spite of being pruned for reproductions is today 5 meters high with a stem of 0.2 meters in diameter.

I am Portuguese and it would be an enormous satisfaction to me if Dr. Meyer were able to prove the statements he made. If I had been told that seeds of spices, or even the plants themselves, had been brought to be acclimatized and to be cultivated nearer home instead of going so far to get them, that would have been understandable. But we must remember and take into account the months that these journeys took, the dangers that waited them on every side, and principally the scarcity of water that usually was rationed; and often there was no water even to ration.

The camellia is indeed an extraordinary plant, but no one will convince me that in its native land it could be such a beautiful specimen that it would induce pioneers to bring it and to care for it and to save it in the way that it is said Camões brought, cared for, and saved his immortal poem "Os Lusíadas."

Tea Seed and the Tea Industry of Assam

W. WIGHT

Assam

India

TEA is made from the young shoots of *Camellia sinensis* (L.). Much Indian tea comes from the state of Assam, notable among the states of India for its progressive tea industry. This is the result of a fortunate combination of natural resources and men with the imagination to develop them.

Lord William Bentinck, who was appointed governor-general of India in 1827, was responsible for "a plan for the accomplishment of the introduction of tea culture into India and for the superintendence of its execution." Bentinck was a man of action, who abolished the sacrifice of widows on the funeral pyres of their husbands, and suppressed the professional murderers known as Thugs. But another man of action, familiar with the climate and people of Assam, caused Bentinck's plan to take an unexpected turn. The man was Charles Alexander Bruce.

When Bruce was appointed government superintendent of tea culture in 1836, it was known that tea plants could be found in Assam, in an apparently wild condition; but the government attached greater importance to the plants which it had introduced from China. Bruce must have thought otherwise, for at the same time as he was managing the China plants, he was eliciting the help of the natives in exploring large tracts of jungle and reclaiming, and bringing into cultivation, colonies of indigenous tea trees. It is not now believed that these colonies were truly wild, but they had been abandoned long before Bruce's time, and seemed to be known only to the tribes on the borders of Assam.

Before Bruce's explorations, the tea known in the occident, and in India, was made in China from the China type of tea plant, which is quite different from that found in Assam. Bruce reported that good tea could be made from the Assam plant, but, in spite of his report, the government decided to continue with the introduction and cultivation of the China plant.

In 1839 the Assam Company was formed under the aegis of the government. Bruce became superintendent of the northern division of the company, and Mr. J. W. Masters became superintendent of the southern division of the company. Both men were dismissed in 1843.

In 1844 Masters published two articles in the *Journal of the Agricultural and Horticultural Society of India*. In the second article he gave the first

After thirty-one years at the Tocklai Experimental Station, Cinnamara, Assam, India, Dr. Wight retired, and returned to the United Kingdom in August, 1962.
—[Editor]

botanical description of the Assam tea plant; and in both articles he pressed for the cultivation of the Assam plant. But an editorial footnote expresses disagreement, and goes on to say that the "Government and the Assam Tea Company wishes to cultivate *the* tea, not *a* tea."

Some ten years later, the general manager of the Assam Tea Company, Mr. George Williamson, was referring to the inferiority of the China plant as a matter of course; and it is possibly fair to say that after 1853—the year of Williamson's appointment—the China plant came to be generally regarded as inferior.

The controversy had drawn attention to the importance of botanical types. The China and the Assam types of plant, previously widely separated, had been brought into close proximity. Hybridisation was inevitable, and might, in some instances, have been brought about deliberately, by interplanting the two varieties to get natural crosses combining the hardiness of the China plant with the greater crop yield of the Assam plant. In any event, the tea estates of Assam became populated with extremely variable hybrid swarms; and the presence of these alongside the Assam plant, and the now despised China plant, aroused interest in the merits and demerits of the variants.

In 1863, Masters indicated that different kinds of tea plant are adapted to different localities. The issue had been given a practical turn about 1860, by the German brothers Amos and Julia Stiefelhagen, who established a standard source of tea seed in the Cachar district of Assam.

Tea in India has always been raised from seed, but the Stiefelhagens were the first to provide a standard source. This was a large orchard of tea trees used solely for the production of seed, and known in India as a *seed barie*. The barie was raised from seed specially collected in Burma. Because of the permanency of the source, the seed which it produced, though known as a "jat," was essentially a horticultural variety or cultivar. Although assignable to the Assam type, and not to the China type, the plants which the Stiefelhagens introduced were much more hardy than those originally found in Assam.

Stiefelhagen's barie was followed by others, in which efforts were made to isolate seemingly desirable variants from the mixture found in cultivation. Samples of seed from fifty different baries were submitted to the Tocklai Experimental Station for trial in 1917. The jats showed a range of differences likely to make them suitable for different localities. However, they left much to be desired in the way of uniformity, and many differed in name only. Lack of attention to this important point has always made it difficult to properly equate jats with cultivars, and has added unnecessary confusion to the supply of tea seed in India. Nevertheless, a conscious effort to provide standard sources of distinct kinds of tea was an early feature of the tea industry in Assam.

The notion of different kinds of seed introduced the valuable element of competition. There were discussions in planters' clubs about the merits and demerits of this and that jat; and experience was gained in the packing and dispatch of tea seed. These developments made Assam seed available outside India. There was a big export trade, and Assam tea seed became known in all tea producing countries.

It has been recorded that the tea plantations in Java were a failure until the Dutch imported seed from Assam. To-day, nearly ten thousand acres of new plantations in the Argentine rely on the Assam plant. This is a big change from the day when the Government of India regarded the Assam plant as not *the* tea. The fact is that *the* tea, made from the China plant, appeals less to the English consumer than the stronger tea made from the Assam plant. And markets in the past have been dominated by the requirements of the English consumer.

There can be no doubt that the Assam plant was a commercial innovation of the first magnitude. Of the many possible forms of tea, improvements have been greatest with the Assam plant. The improved jats cultivated to-day are slightly hybrid, and have, in fact, benefited from earlier crosses with the China plant. But they are far from hardy, and are peculiarly suited to the Brahmaputra valley of Assam, and not, for instance, to north Bengal. Strength and pungency had been improved to an extent that made routine replanting of estates economically worth-while after 1930. Because of this replanting, tea made in the Brahmaputra valley commands exceptionally high prices.

The situation is different in other parts of Assam, and in other states of India, where regional jats comparable with those in the Brahmaputra valley have not been developed. Other regions contain some of the original hybrid swarms, and many populations derived from Stiefel's barie.

However, circumstances similar to those which determined the crop structure of the Brahmaputra valley, have determined distinct crop structures in most of the tea producing districts, like Darjeeling, north Bengal, Travancore; and, outside India, the high elevation estates of Ceylon. Each of these regions makes a distinct kind of tea. For example, most tea drinkers know that Ceylon tea, Darjeeling tea, and Assam tea, taste differently.

It was wrongly thought that the taste of the tea depended on the district in which it was made. It is now known that the taste of the tea depends primarily on the kind of tea plant from which it is made. But the concept of an Assam type of plant, and a China type of plant, and no other type, is insufficient for an understanding of the kinds, or variants, of the tea plant that are in cultivation.

An article written by Masters in 1844 (*J. Agric. and Hort. Soc. of India*) indicates that there is a clearly defined Assam type, and an improperly defined mixture of other plants, not assignable to the Assam type, that are uncritically designated "China," and presumed equivalent to the Linnean type (*Camellia sinensis* var. *sinensis*). In other words, everything not recognisable as the Assam type becomes "China" by difference, and not by definition. This unsatisfactory system still underlies nearly everything that is written in India about the tea plant.

The Assam plant, though frequently regarded by botanists as a variety of the China plant (*C. sinensis* var. *assamica*) could be more truly described as a separate species. A distinct variety of the Assam plant, of great value for tea breeding, occurs in Indo-China (*Phytomorph.* 9, 372, 1959). It has been described at the Tocklai Experimental Station as a "Southern form" of tea, but it could possibly be equated with the type to which Sir George Watt gave the epithet *lasiocalyx*.

The plants introduced by the government of India included true breeding populations that can be equated with the original Linnean type (*Camellia sinensis*) illustrated by Kaempfer in 1712. Other populations from China must have been species hybrids at the time of their introduction. Evidence has been found for a *C. irrawadiensis* ancestry, but other, more remote, species have undoubtedly played a part. It seems to the writer that species like *C. flava* and *C. petelotii* have contributed to these hybrid populations, which are necessary for the production of the famous Darjeeling flavour. By breeding from selected plants, it has been possible to reproduce Darjeeling flavour in the plains of Assam.

These discoveries are of great importance, and could open a new chapter in the history of tea production. Tea producers naturally wish to expand their markets, but new markets are unlikely to be satisfied with the kind of tea most desired in England. Several kinds of tea will be necessary, and the existence of species crosses shows that new teas might be added to those already known. Furthermore, the Assam kind of tea, the Darjeeling kind of tea, the Ceylon kind of tea, and other kinds of tea, might be made in the same place—and this might equally well be on the continent of America, or Asia, or Africa.

A new chapter in the history of the tea industry is possible. But, once again, this will depend on men who are not hampered by traditional belief, who are willing to explore, in more senses than one, lesser known species of *Camellia*, not recognised as *the* tea.

Border Forest Garden

ANDREW C. SOFFE

Umtali

Southern Rhodesia

RHODESIA was occupied by European Pioneers (of whom my wife's father was one) in 1890 and Cecil John Rhodes offered each of the Pioneers free land up to 6,000 acres. Soon after the occupation, disputes arose between Rhodesia and Moçambique and as the result of the decision made by the International Boundary Commission in 1898, the 6,000 acres I later acquired, which in 1890 had been "pegged" by Rhodesian Pioneers, fell into Portuguese territory. I purchased Border Forest in 1925 from John Meikle having fallen in love with the beauty of its forest and many mountain streams. There were no roads to the property until 1937 and for twelve years I had to walk nine miles each way—a journey I enjoyed every free weekend.

The garden is situated on the eastern slope of mountainous country rising to 6,000 ft. and varies in altitude from 3,700 to 3,800 ft. The countryside is very rocky and most of the garden has been terraced but for compensation the shallow soil is rich in humus. Temperatures vary from 40° to 90°F. and we do not have any frost. Rainfall averages 80 inches per annum, but during the dry season much watering is required and this is piped from a mountain stream which cascades down through the forest for some 1,600ft. before reaching sunlight.

In the early days I devoted my time to planting trees and shrubs and pioneered the first commercial conifer plantation in Moçambique. The indigenous forest trees such as mahoganies and albizzias are very large, with trunks up to seven feet in diameter, and these have been supplemented by many trees, foremost of which are the giant eucalypts (250ft. in height) which flank the garden on two sides.

Colour is obtained in the garden throughout the year with collections of magnolias, evergreen azaleas, hydrangeas, hibiscus, lilies, cannas, bougainvilleas, brunfelsias, petreas and agapanthus. Tree Ferns grow luxuriantly and many other species of fern including the Maidenhair seed very freely everywhere.

In recent years my wife and I have concentrated on making a small collection of camellias and now have about seventy different cultivars. Most varieties of *C. japonica* and *C. sasanqua* grow vigorously under our conditions but *C. reticula* has not proved very satisfactory. *C. tsaii* has made an upright plant and promises well. We shall continue to increase our collection and to encourage the cultivation of camellias in Rhodesia.

I should stress that although conditions at Border Forest are favourable to camellia growing, these are not common to the whole of Rhodesia. I am optimistic that camellias will thrive in the mountainous eastern districts of Southern Rhodesia especially in the Vumba Mountains near Umtali. In our climate careful attention must be given to three things: adequate shade, ample water and good humus content of the soil.



'Alba Plena' at Border Forest



Camellia tsaii (centre) at Border Forest.



Typical scene in Border Forest garden. *Araucaria bidwillii* in centre.

Among the camellias grown at Border Forest are:

C. saluenensis

'Aaron's Ruby'
'Aldophe Audusson'
'Alba Plena'
'Alba Simplex'
'Albertii'
'An-Flo-Lee'
'Ann Miller'
'Arejishi'
'Betty Robinson'
'Blood of China'
'Bokuhan'
'C. M. Hovey'
'C. M. Wilson'
'Coquettii'
'Comte de Gomer'
'Dr. John D. Bell'
'Elegans Variegated'
'Frau Minna Seidel'
'Gauntlettii'
'Gigantea'
'Guilio Nuccio'

C. tsaii

C. japonica

'Hagoromo'
'Hatsuzakura'
'Helen K.'
'Hikarugenji'
'Lady Clare'
'Marie Griffin'
'Mathotiana Rosea'
'Monte Carlo'
'Mrs. Abby Wilder'
'Nagasaki'
'Peach Blossom'
'Praelara'
'Preston Rose'
'Ristorii'
'R. L. Wheeler'
'Rosea Superba'
'Sara C. Hastie'
'Spring Triumph'
'Trionfo di Lodi'
'William Bull'
'White Empress'

C. sasanqua and allied species

'Dawn'
'Hi'odoshi'
* 'Hiryu'

'Jean May'
'Showa Supreme'
'Setsugekka'

*The cultivar known incorrectly as 'Hiryu' in Australia.

C. reticulata

'Ho Yeh Tieh Chih' ('Butterfly
Wings')

'Ta Ma Nao' ('Cornelian')

'Ta Tao Hung' ('Crimson
Robe')

'Shih Tzu Tou' ('Lionhead')

'Sung Tzu Lin' ('Pagoda')

A superb copy of the *Iconographie du Genre Camellia* by L'Abbé Berlese was sold this spring by the London booksellers, Bernard Quaritch Ltd., for the sum of £2,000 or \$5600.00.

The Japanese Sazanka and its Relatives

T. J. SAVIGE

Victoria

Australia

WHEN the Swedish physician and botanist, Karl Peter Thunberg, was stationed at Nagasaki, Japan, during the years 1775-1778 as surgeon for the Dutch East India Company he spent some time on the study of the local flora. Among the plants he found growing in the immediate area was one that he described and illustrated in his *Flora Japonica* plate 30, 1784, giving it the name *Camellia sasanqua*, this being a latinized form of the local Japanese. Engelbert Kaempfer who had been stationed at Nagasaki in the same capacity as Thunberg during the years 1690 to 1692 had also mentioned *C. sasanqua* in his *Amoenitatum Exoticarum* 1712.

However, closely related camellia species have also been casually called sazanka or sasanqua. An interesting list of these related species is given on page 6 of Eikichi Satomi's *Nomenclature List of Sasanqua in Japan* (1958). The exact taxonomic position of some of these is not generally agreed upon, in most cases due to insufficient material being available to make a precise study of the botanical position of these plants. Therefore, some may in fact, be only distant relatives of *C. sasanqua*.

In Satomi's list he equates the Japanese name with a specific name and a study of this is interesting as it brings to light some of the difficulties inherent in trying to establish the identities of species in different parts of the world and the problem of having the correct plant material for study.

Camellia sasanqua Thunberg. This is the first of the list and the Japanese names given are Hime-tsubaki and Ko-tsubaki or the small camellia. Sasanqua is also given as a Japanese common name but this is a typographical error which has been corrected to sazanka by the original author.

Camellia kissi Wallich. Satomi next lists Togariba-sazanka and gives it as *C. sasanqua* var. *kissi*. *C. kissi*, as a species was originally named by Wallich in 1820. In a later regrouping by Pierre it was given as *Thea sasanqua* var. *kissi* but both of these are regarded as synonyms. The species grows to a small tree up to 35 feet high with intransient, small, single, white, fragrant flowers and occurs naturally in Nepal, Yunnan, Burma and Indo-China.

Camellia oleifera Abel. The next on the list is the Oh-sazanka or the large sasanqua and Satomi refers it to *C. sasanqua* var. *oleosa* as considered by Rehder. A synonym for the tea plant, *C. sinensis*, is *C. oleosa* given by Loureiro. However, Rehder apparently misunderstood part of Loureiro's description and accepted *Thea oleosa* Loureiro as the same as *C. oleifera*. Hence, the particular species that Satomi had in mind when making the list can only be a matter of conjecture, but it seems most likely a member of the species *C. oleifera*.

Oshima-sazanka or Futabana-sazanka is next given as the Japanese name for *C. biflora*. This is now regarded as a synonym for *C. oleifera* Abel, so Futabana-sazanka could be a variant of the species to Oh-sazanka. However, to make it more confusing, further down the list the Japanese name Aburatsubaki is also equated with *C. oleifera*.

C. oleifera was described by Abel in 1818 and the plant he named is a shrub which will grow to about 20 feet and have small single, white, fragrant flowers in the wild state, but selected garden forms exist with pink colouring and some doubling of the blooms. The species is native to China, Indo-China, Burma, Siam and Assam.

Camellia brevistyla (Hayata) Cohen Stuart. The names Miyama-sazanka or Shima-sazanka are given as the Japanese for *C. brevistyla* named *Thea brevistyla* by Hayata in 1908. The species is a slender tree from Formosa with leaves similar to *C. sasanqua* but with smaller, single, white flowers.

Camellia caudata Wallich. Taiwan-hime-tsubaki, as the name implies is a native of Formosa; it also occurs through Burma, Indo-China and Hainan. This species is the *C. caudata* described by Wallich in 1829. The *C. gracilis* described by Hemsley in 1895 is regarded by many botanists as a synonym although Satomi separates this under the Japanese name of Shima-tsubaki (Satomi's correction for the typographical error Shima-sudaki). The species is rather variable but is generally an upright growing tree 20 feet in height with slender branches and twigs and producing smallish, single, white flowers having the filaments covered densely with fine hairs.

Camellia transarisanensis (Hayata) Cohen Stuart. The Japanese Taiwan-hime-sazanka is given by Satomi as *C. parvifolia*, synonym *Thea transarisanensis* but *C. transarisanensis* is now known to be the correct name. It forms a spreading twiggy tree with small, serrated, green leaves and small, white, single flowers. Sealy classifies this species in section *Theopsis* with *C. fraterna*, *C. rosaeflora*, *C. maliflora*, *C. tsaii*, and others of proven garden merit.

Camellia transnokoensis. Hayata. Called by Satomi, Teriba-hime-sazanka, this Formosan species was first named by Hayata in 1919 and somewhat resembles *C. transarisanensis* but probably has a larger flower of some shade of red.

The balance of the list covers species that Mr. J. R. Sealy includes in *A Revision of the Genus Camellia* as doubtful and imperfectly known. However, these seem to be well known to the Japanese and their botanists have given many of them specific rank; no doubt many of them will eventually be generally recognised as species or sub-species.

Camellia tenuiflora (Hayata) Cohen Stuart. Satomi lists Kemi-no-sazanka as *C. gnaphalocarpa* and Wantan-sazanka as *C. tenuiflora*. Sealy holds that these are all the same species, namely, *C. tenuiflora*. It is a Formosan species somewhere between *C. sasanqua* and *C. brevistyla* and from the various descriptions and lacking material for examination, Sealy was not able to decide whether or not it should be recognised as a distinct species.

Camellia hiemalis Nakai. Kan-tsubaki is given as the Japanese name for *C. hiemalis* which is considered by Sealy to be a form of *C. sasanqua*. Whilst this may be so, cytologically there may be a difference as most of the early

reports list this species as tetraploid whilst *C. sasanqua* is generally hexaploid, but in the 1959 *American Camellia Yearbook* A. E. Longley and E. C. Tourje list two counts of $n=45$ for this species. Some of the best known garden varieties are 'Shishigashira,' 'Showanosakae' and 'Showa Supreme.' They are mostly low growing spreading shrubs, with the flowers showing a greater tendency to doubling than those of *C. sasanqua*.

Camellia iodina Nakai. The next on the list is Kuro-tsubaki given by Satomi as *C. iodina*. This specific name appears to have little standing botanically and 'Kuro-tsubaki' is usually classed as a cultivar of *C. japonica*. It has been called the "black" camellia from the very deep colour of its blooms.

Camellia miyagii (Koidzumi) Makino & Nemoto. The Okinawa-sazanka was the given the specific name of *Thea miyagii* by Koidzumi in 1918. It is a shrub growing to about ten feet from Liu Kiu Islands and bears a single white flower. Sealy considers it may be a distinct species somewhere between *C. sasanqua* and *C. oleifera* but had insufficient material to make a positive decision.

Camellia shinkoensis (Hayata) Cohen Stuart. Called by the Japanese Shinko-sazanka or Shinko-tsubaki from Shinko, Formosa, where it grows wild; it has large leaves and is said to have small red single flowers. The position of the species is doubtful and it may finally be referred to the genus *Tutcheria*.

Camellia tegmentosa (Koidzumi) Makino & Nemoto. This species from Okinawa is given the Japanese name of Sazanka-modoki or Sakaki-tsubaki and was dedicated *Thea tegmentosa* by Koidzumi in 1918. Sealy was not able to identify this species due to insufficient material, but considered that it resembled *C. Kissi*.

Camellia vernalis (Makino) Makino. Listed by Satomi as Haru-sazanka; the species was called *Thea sasanqua* var. *vernalis* by Makino in 1905 but later in 1918 he raised it to a species. The cultivar known as 'Dawn' is the best example of this species and seems close to the type specimen. It has a different and longer flowering season than *C. sasanqua* cultivars. It sets seed extremely rarely and is given as a diploid by Dr. P. L. Hilsman in the Southern California Camellia Society's *Camellia Review*, July 1956, and as a triploid by Albert E. Longley in the 1959 *American Camellia Yearbook*.

Camellia virgata (Koidzumi) Makino & Nemoto. Called Hisakaki-sazanka in Japan, this species was first listed as *Thea virgata* by Koidzumi in 1918 and later designated *C. virgata* by Makino and Nemoto in 1931; it was referred to the genus *Tutcheria* by Nakai in 1940. Sealy suggested that as the description is similar to *C. tegmentosa* they may be the same species and also that Nakai could be right in referring the species to *Tutcheria*.

Most of the above mentioned should be relatively hardy having regard to the climate of their places of origin and many may be useful for hybridization. The International Camellia Society is in a position to organize the supply of plant material for taxonomic studies and so permit a more uniform and definite classification of doubtful species and also living material for botanical study and hybridization. It is a source of wonder, that, in this modern age, so much remains to be done to complete our knowledge of camellias and other plant groups; it is hoped that members of the Society by the interchange of information and material and the publication of fresh knowledge may help in some measure to rectify the situation.

Camellia Test Garden of Cards

ALBERT FENDIG

Georgia

U. S. A.

CAMELLIAS of all species probably are designated by more than fifteen thousand names the world over. In many instances a particular camellia may be called by one name in one part of the world and another name in a different region, in fact some camellias are known by distinct names in the same area.

It is the responsibility of the nomenclator to determine the correct name, but there must be some systematic method of inviting his attention to the similarity of certain camellias. The writer proposes that this may be accomplished at least in part, by a camellia test garden of cards.

Every different camellia possesses certain characteristics which make it distinctive. The card test garden must be designed to bring together camellias with similar characteristics yet at the same time point out their differences from other cultivars. This article will describe a card test garden of camellias devised by its author. A system I proposed in 1952 which was published in *The American Camellia Yearbook* for that year, has been improved and enlarged but is not intended to be the final word. It is hoped that it will stimulate thinking leading to improvements and the ultimate establishment of an international camellia test garden of cards.

What are the characteristics of camellias which may be used to distinguish one camellia from another?

First—We may divide all camellias into the seventy-five or more separate species to which they belong, and since we must use abbreviations two letters of the alphabet are used to denote the species. For example—Ja for *C. japonica*; Sq for *C. sasanqua*; Sl for *C. saluenensis*; Ru for *C. rusticana*; and so on.

Second—We may classify all camellias according to color. In the suggested system there are six main color classifications: Red, red-variegated, pink, pink-variegated, white, white-variegated.

Red will include any of the colors lying between orange (red-yellow) and violet (red-blue) and for the system will be abbreviated as R. Red-variegated will include any combination of colors where red predominates and be abbreviated as RV. Pink, actually a red of low saturation and high brilliance, will include colors ranging from blush to rose and is shown as P. Pink-variegated includes any combination of colors where pink predominates and is abbreviated PV. White will include any color from pure snow to palest yellow and be abbreviated W. White-variegated denotes any combination of colors where white predominates and is shown as WV.

While the classification system, itself, will not be based on shades of the color it can be seen that within the test garden of cards itself cultivars of the same classification may be differentiated by shades.

Third—Camellia blooms may be further classified by their difference in formation. Berlese did this by reference to other flowers such as the anemone, the rose and the peony. This writer discarded such a system because anemones, roses and peonies themselves differ in formation; because all camellia growers are not familiar with anemones and peonies; and because camellias lose some of their glory by being described in terms of other flowers. Dr. Hume's system ⁽¹⁾ of classifying in terms of the extent of doubleness has much merit but since his terms are not truly descriptive of bloom formation the writer has devised terms which in themselves are descriptive and easily applied to the bloom to be classified.

These are five typical camellia flower formations:—

(1) Those with one or more tiers of petals and having a center of stamens. This, the simple formation, will be classified as "simple" and will be abbreviated as SI.

(2) Those of irregular formation, having stamens intermingled with petals and petaloids. Such formation will be classed as "irregular" and abbreviated as IR.

(3) Then we have the completely symmetrical, imbricated bloom without visible stamens which best may be described for our system as "formal" abbreviated as FO.

(4) Another class are those blooms without visible stamens in early stages which are not completely symmetrical nor completely imbricated. These we will term "semi-formals" abbreviated as SF.

(5) Finally, there are those blooms having few or no stamens where the petals and petaloids are clustered together in a ball or a mass. These we will call "clustered" abbreviated as CL.

Fourth—Camellias may be classified by the season of predominate bloom. In most climates camellias bloom over a period of approximately six months. Those blooming in the early part of the season may be classified as "early" and abbreviated as E, "mid-season" as M, and "late" as L.

Fifth—Finally camellia blooms may be classified by size. Those having a diameter of less than three inches as "small" abbreviated SM, from three to five inches as "average" abbreviated AV, and greater than five inches as "large" abbreviated LG.

Now in our test garden of cards we put all red blooms of one species in one section; all red-variegated in another; and each of the other color classifications in different sections. We subdivide each of these six colors into the five formation classifications. We further subdivide these into the

(1) See *Camellias in America*, Revised Edition 1955, by Dr. H. Harold Hume, p.237-238.

three season classifications, and finally into the three size classifications. In this fashion we have achieved 270 different, easy to apply classifications for each main species.

The author's own test garden of cards is done with 3 x 5 (inch) cards. The back as well as the front of the card is utilized. A complete card gives on its front the name of the camellia, the species to which it belongs, its classification, its known synonyms, a full description of the flower, buds, foliage and traits. The back of the card gives history, sources of information, place where photographs may be found, and other pertinent information or remarks.

This test garden of cards is a valuable means of identifying a plant when the label is lost or name is for any reason unknown. If, for example, the plant bears a flower which classifies W(SI)E-AV you go to this section of your card system where you find perhaps twenty cultivars bearing this classification. Now you read the full description and find that your plant has blooms, leaves and traits typical of 'Imura.' If you still have doubts you now can compare with a known plant of 'Imura.'

Again suppose you desire to acquire for a particular spot in your garden a hardy, red formal. This system will give you the opportunity to study the red formals and decide which best fits your purpose.

Finally, perhaps, the most important feature of this system is the fact that identical camellias of different names will fall together under the same classification and after due study be proven that they are in fact identical.

Thus, it readily can be seen that a camellia test garden of cards will be a valuable tool for both the amateur and professional grower.

Camellia reticulata in New Zealand

T. DURRANT

Tirau

New Zealand

Very conflicting reports are received about the behaviour of garden cultivars of *Camellia reticulata* in various parts of the world. Those from some areas of the United States seem to indicate that this species has almost been written off. One wonders whether they have really had a fair trial or whether the rushed methods of propagation used (involving constant light, high levels of temperature and humidity and continuous fertilization of stock plants to obtain bud material) may not be substantially to blame for some of the failures.

The history of *C. reticulata* in New Zealand seems to indicate that the mild, oceanic climate and free draining soils of volcanic origin are highly suitable for the species. 'Captain Rawes' has been widely grown; the earliest I can trace being one at the McGregor homestead at Fordell—probably planted in the 1900's. In the early 1930's W. R. Stevens, then of Bulls in the North Island, imported a number of 'Captain Rawes' from Charles Smith & Sons of Guernsey, propagated them by inarching, and was the first nurseryman to

list them in New Zealand. Using a side grafting technique on small seedling stocks, one wholesale firm now produces over 1200 plants of 'Captain Rawes' each year and is rapidly building up stocks of all the *C. reticulata* cultivars.

The wild form (*C. reticulata* forma *simplex*) probably did not arrive before 1953, when several plants were imported from G. Reuthe's Nursery in Kent by Gordon Adams. The same importer was responsible for the arrival, soon afterwards, of the first Kunming reticulatas, some of which were later transferred to our garden with the rest of the Adams collection. Examples of these plants in commercial hands were cut so hard for scion material that many succumbed and no idea of the true habit of growth could be obtained. After some discussion with the late Mr. Ralph Peer, we decided to import a fresh lot of plants, give them the best possible conditions and, by allowing them to grow without interference, ascertain their true habit and form.

Plants imported into New Zealand have to adjust themselves to the transfer from the Northern to the Southern Hemisphere, which involves sudden changes of season with either two summers or two winters consecutively. They are also required to travel with bare roots and must be re-established in soil on arrival. On the 20th January 1957, a collection of Kunming reticulatas was received from a Californian nursery and arrived in hot, dry weather. They were immediately planted into a free draining, acid soil mix, consisting of 2 parts well rotted turf mould, 1 part fibrous peat and 1 part sharp river sand. All the plants were grafts about 16-20 inches high, on stocks of $\frac{1}{2}$ to $\frac{3}{4}$ inch diameter. In New Zealand, January and February are the hottest months of the year and, to provide the necessary humidity, we kept them under polythene, well shaded and syringed them freely twice daily. For some weeks noon shade temperatures were between 80° and 85° F. After losing a few leaves, all the plants commenced to grow within 21 days of arrival and vigorous new shoots appeared from all terminals. To protect this young growth, which had little time to harden off before the winter, they remained under polythene until the following Spring and were well covered on frosty nights. In August 1957, early Spring here, all were put into 10 inch pots and transferred to a lath house. Normally *C. reticulata* only makes one run of growth a year but these grew twice in the period September to February, by which time they had more than doubled their size on arrival. 'Purple Gown' was an exception and grew once only.

In August 1958 we planted them out in shrubberies, in positions where they were sheltered from the wind and early morning sun but otherwise received the same treatment as other camellias in the garden. Writing 5½ years after their arrival, it is possible to make some assessment of their garden merit under our conditions. In almost all cases the flowers have been sensational in size, colour and quality and have been freely produced each season. Radiation frosts of up to 12° F. have been experienced without causing bud drop. The flowering season occurs in August and for three weeks there is a splendid display; followed by a sprinkling of flowers from second buds until mid-September.

'Crimson Robe'. This has made vigorous, well branched, open growth and the largest is now 7 feet high and 5 feet 6 inches across. Another now 6ft. by 4ft. 6ins. arrived under the incorrect name of 'Noble Pearl.' Both are splendid plants and quite breathtaking when in full display with flowers often more than eight inches across. 'Crimson Robe' would be worth growing if it only flowered once every seven years but it does so very generously every season.

'Pagoda', also known as 'Robert Fortune' has a much more dense habit of growth than is usual in *C. reticulata*. Two plants are now excellently furnished shrubs 5ft. high and 4ft. across. Flower buds set very freely but some seasons are reduced by bud dropping in the winter. In spite of this one specimen displayed over thirty perfect normal double flowers last August.

'Butterfly Wings' is similar in habit and foliage to 'Pagoda', though the flowers are quite different. It is now a dense, well furnished bush 6ft. high and 4ft. 6ins. across. The early flowers which did not appear until 1959 were small, but now the shrub is established they have improved greatly and it is a very fine camellia.

'Shot Silk' and 'Osmanthus Leaf'. Ralph Peer suggested that these two camellias would grow naturally into small trees with a spreading head. Great care was taken to ensure that leading growths were not damaged and both have made straight trunks up to 9ft. high and are now branching strongly at the top. The flowers of both are first class and borne very freely.

'Noble Pearl' and 'Tali Queen'. Three efforts to import 'Noble Pearl' have resulted each time in another 'Crimson Robe.' However, it is said that 'Noble Pearl' and 'Tali Queen' were the same in the original shipment to the United States from China—whatever may be the case in Kunming. Here 'Tali Queen' has made a very sturdy, rather slow growing bush, now 5ft. high and 4ft. 6ins. across. Some very fine large flowers have been produced but the display has not been as spectacular as many of the others.

'Lionhead', 'Chang's Temple' and 'Cornelian'. Several plants grown under each label leave one in no doubt that they are identical for although quite a wide range of flower shape and variegation is produced it is common to all three names. This, again, is probably the result of mislabelling in the original Chinese shipment. While some individual flowers are very beautiful, all our plants have been too heavily infected with virus to thrive and produce satisfactory shrubs.

'Buddha'. This has proved a difficult subject to establish; the first did not survive and two other plants have dropped most of their leaves. One now under lath seems to be making progress but we cannot give any opinion of this cultivar.

'Takeiyeh' has made a sturdy well branched shrub, some 6 ft. high and 2ft. 6in. across. The pale pink rose-form flowers are freely produced and a delight to see.

'Professor Tsai' suffered from the journey with bare roots and took two or three seasons to establish. In habit it is open and sparse and the flowers are not spectacular.

'Purple Gown' appears to be the slowest to grow and the hardest to propagate. A plant imported in 1953 is still only 3ft. 6in. high but never fails to produce blooms which are outstanding in colour and form. The indications are that it will make a sturdy well branched shrub.

'Chrysanthemum Petal' has made an upright strong plant some 7 ft. high and well branched at the top. It has a good bud set for the 1962 season and a later importation grown in a container has flowered freely; the small rose-pink formal double flowers are outstandingly lovely and it is bound to become popular.

'Confucius'. The plant imported in 1957 has made the strongest and sturdiest growth of all. The new growths are a good deal thicker than a pencil and embarrassingly heavy when used as scions for grafting. It is now 6ft. high, 4ft. 6in. across and furnished to the ground. There is no trace of virus in the original plant but later importations are heavily affected and one suspects indiscriminate use of infected understock. It seems possible that a double dose of virus infection from both scion and stock can have a drastic effect on the resulting plants. 'Confucius' whilst flowering each season has not been as floriferous as most.

'Willow Wand' and 'Moutancha'. It is not possible to report on the habit of growth as the original plants did not survive the first season.

An interesting development has been a programme of carefully controlled pollination using the wild form of *C. reticulata* as the seed parent. With pollen from 'Crimson Robe' a series of seedlings has resulted with vigorous habit and splendid dark green, heavily serrated, leaves, in some cases 7in. long and 3½ins. wide. Although the wild form of *C. reticulata* has nearly finished flowering when the Kunmings bloom, we have seedlings with most varieties. 'Crimson Robe' and 'Shot Silk' set seed by hand pollination and several batches of interesting seedlings are coming along. The aim of our programme is to produce reticulatas with seeding vigour, good habits and freedom from virus.

C. reticulata must be examined on its own merit and not compared with *C. japonica*. The more open habit of the *C. reticulata* cultivars, displays their magnificent and often dramatic flowers whilst also providing a good contrast of form and shape in the garden. During several series of radiation night frosts averaging 6°, it has been noticed that flowers of the cultivars of *C. reticulata* suffered much less than those of *C. japonica*. This is confirmed by Dr. Brian Doak's hybrids between *C. saluenensis* and *C. reticulata* 'Phyl Doak,' 'Barbara Clark,' 'Brian' and 'Dr. Lesley,' all of which suffered no damage in frost which heavily affected 'Donation,' a hybrid of *C. saluenensis* and *C. japonica*. In New Zealand conditions, *C. reticulata* is proving a first class garden shrub with the cultivars 'Crimson Robe,' 'Pagoda,' 'Butterfly Wings,' 'Shot Silk,' 'Osmanthus Leaf' and 'Takeyeh' being quite outstanding. When the mad rush to propagate them quickly recedes, it is likely that a more careful stock selection will give better plants, as easy to establish and cultivate as any other camellia.

The valid names for the commercial synonyms used in this article are as follows:—

'Butterfly Wings'	=	'Ho Yeh Tieh Chih'
'Chang's Temple'	=	'Chang Chia Cha'
'Chrysanthemum Petal'	=	'Chu Pan'
'Cornelian'	=	'Ta Ma Nao'
'Crimson Robe'	=	'Ta Tao Hung'
'Lionhead'	=	'Shih Tzu Tou'
'Moutancha'	=	'Mou Tan Cha'
'Noble Pearl'	=	'Pao Chu'
'Osmanthus Leaf'	=	'Hsiao Kuei Yeh'
'Purple Gown'	=	'Tzu Pao'
'Shot Silk'	=	'Ta Yin Hung'
'Takeyeh'	=	'Ta Kuei Yeh'
'Tali Queen'	=	'Tali Cha'
'Willow Wand'	=	'Liu Yeh Yin Hung'
'Pagoda' ('Robert Fortune')	=	'Sung Tzu Lin'

EDITOR

The Variability of Species in Improvement of Ornamental Plants

JOHN L. CREECH

Maryland

U. S. A.

THE improvement of ornamental plants through breeding and selection does not often allow for a critical evaluation, prior to their use, of the parental species involved. This is largely due to (1) the great number of species used as landscape plants; (2) the lack of availability of a broad sampling of plants from the natural range of any particular species; and (3) the time factor involved in raising adequate progenies of woody plant seedlings. As a result, many of our present garden varieties are either selections from narrow segments of variability of a species, or seedlings of unknown origin.

The need to examine critically the variability of our ornamental species lies in the fact that characters exist which have not been utilized to full advantage. This point is illustrated by observations which I made during three collecting trips to Japan for azaleas, camellias, daylilies, and hollies under the cooperative ornamental plant introduction program sponsored by the U.S. Department of Agriculture and Longwood Gardens, Kennett Square, Pennsylvania.

Japan is the homeland for some of our most valuable ornamental plants and many collectors have visited that country during the last three centuries. However, the early collectors to Japan were mainly interested in finding species and varieties that would be new to the gardens of the western world and, logically, did not attempt to sample the range of plant distribution or natural variation of species not yet "garden-tested." It is only after such plants have been successfully incorporated into our horticulture that we begin to appreciate the need to examine the species more closely in developing improved varieties.

Rhododendron japonicum Suringar, for example, is a well-known garden plant and has been used to create numerous hybrids. This azalea inhabits the grass and scrub-wooded moorlands of Japan in the islands of Kyushu, Shikoku, and Honshu. It does not occur naturally on Hokkaido although plants, said to have escaped from cultivation, are scattered in the hills around the city of Matsumae, near Hakodate.

Although this article by Dr. John L. Creech of the U.S. Department of Agriculture, Agricultural Research Service, Crops Research Division, Beltsville, Maryland, does not deal entirely with camellias, it is printed in full as its subject is particularly applicable to the genus.

Wilson (1) recorded the distribution of *R. japonicum* as restricted to the main island of Honshu as far north as Mt. Hayachine. This azalea has a much wider distribution than Wilson was able to see under the circumstances of travel that existed when he visited Japan. On Kyushu, *R. japonicum* occurs on low rolling hills not far from Kurume and is scattered through pastures where most other plant species have been grazed off by cattle. Except for pine and chestnut trees, the azaleas dominate these hot, sunny plateaus.

At its northern limit of natural distribution, *R. japonicum* is abundant on Mt. Hakkoda, Honshu. Here the azaleas grow around the perimeters of moist sphagnum bogs at elevations up to about 3000 feet, under such swampy conditions that one sinks into several inches of water when invading these bogs. Occasionally, *R. japonicum* can be found in lightly wooded coastal areas along the Pacific coast of Honshu, but it is essentially an upland, sun-loving plant and grows to a height of 3 to 4 feet, producing stout, erect stems from a somewhat stoloniferous base. It flowers from late April to late June, according to latitude. The flowers, which appear with the leaves, vary from clear golden yellow to brilliant orange-red. These are borne in terminal clusters of 6 to 12 flowers; each bloom is 2 to 3 inches across.

Despite the long history of *R. japonicum* as a cultivated plant, information as to its flowering habit is incomplete. It is doubtful that material in cultivation is representative of the variation which can be seen in the wild in Japan. For example, the yellow-flowered plant was considered so rare that Wilson regarded it as a distinct form which he named *R. japonicum* f. *aureum*. He based his opinion on material cultivated in the Tokyo Botanic Garden. Had he been fortunate enough to see *R. japonicum* in Kyushu, Wilson would not have considered the yellow character of such importance, for almost a third of the plants on the hills around Kita-yamada have yellow flowers. The other flower colors range through various yellow-orange mixtures and pink to orange-red. It was reported to me that seed gathered from plants with yellow flowers produces populations that are almost exclusively yellow-flowered.

As one follows the distribution of *R. japonicum* northward through Honshu, the yellow-flowered type ceased to be common. At Hakkoda-san, the northern limit of distribution, all the plants have uniformly orange-red flowers, so much so that one could regard this as a distinct biotype. It is interesting to note that the greatest range of flower color is confined to the warmer end of the distribution where more plants produce yellow flowers. In the Orient the only close relative of this azalea is *R. molle* G. Don. The latter azalea comes from even warmer localities of south China and is exclusively yellow-flowered.

Rhododendron obtusum var. *kaempferi* Wilson has the broadest distribution of evergreen azaleas native to Japan. It occurs from the coast of southern Kyushu to the mountains near Lake Shikotsu, Hokkaido. It probably has been used more often as a parent than related azalea species. Despite this extensive use, *R. obtusum* var. *kaempferi* has never been evaluated with respect to the merits of local types which exist in the broad range of its environments of its native home. In Kyushu, it inhabits the highly volcanic soils of the cool, humid slopes of Sakurajima and is found on grassy upland plateaus on Mt. Takatoge, Mt. Kirishima, and Mt. Aso. Along

the Pacific coast of Honshu, Kaempfer's azalea occurs around the edges of pine forests and grows on the tops of the mountains where it may be found among deutzias, hollies and deciduous azaleas. In Hokkaido, it flourishes around sulphur beds and in the volcanic soils of Mr. Esan, and in cutover fields around Lake Shikotsu. Traveling from south to north, one can see this azalea in bloom from April 20 to July 18. Collections were made at 24 distinct localities representing a wide variation in habitat.

It is unfortunate that this remarkable azalea, which is so extensively distributed in Japan, is relegated to varietal status. When one considers that *R. obtusum* var. *kaempferi* is a parent common to at least three natural hybrids, including one with *R. obtusum* f. *japonicum* Wilson, the basis for this reduced status seems less evident than when the existence of such natural hybrids was not known.

Camellia japonica L. is a maritime plant and even in Japan's island environment it occurs extensively in the coastal forests only. Despite this limitation, there is still leeway for future improvement in hardiness of the Japanese camellia, for the garden varieties we grow are derived from parents from a limited portion of the natural distribution of *C. japonica*.

The northern biotypes of *C. japonica* and individuals growing at high elevations throughout the islands should be evaluated for hardiness. *Camellia japonica* grows along both coasts of the island of Honshu. On the Japan Sea side it reaches Cape Kogane (40° 40'N) with an additional isolated colony at Kominato (40° 55'N). These localities have considerable snow in winter. Along the Pacific coast, *C. japonica* occurs as far north as Raga (39° 55'N), but this region is characterized by bright, sunny winters and is influenced by the cold Oyashio current which flows down from the Kuriles to the 38th parallel bringing cold winds from the Pacific Ocean. In northern areas, *C. japonica* flowers as late as mid-May. Until the current series of USDA-Longwood explorations were undertaken, none of the camellias from these localities had been introduced into cultivation. As a result of our efforts, more than 33 collections of cuttings and seeds have now been established in the United States.

Another illustration of variation in natural flowering habit is provided by *Hemerocallis*, the daylily, in Japan. Among the species and varieties, there is a variety of *Hemerocallis aurantiaca* Baker described as *littorea* Nakai. Although *H. aurantiaca* is native to China where it blooms in mid-summer, *H. a. littorea* is native to the seashores of the warmer parts of southwestern Honshu, Shikoku, and Kyushu where thousands of plants bloom in late October on the sea cliffs at Ashizuri-zaki, Shikoku. This variety has grown well at the U.S. Plant Introduction Station, Glenn Dale, Maryland, under a winter climate far more severe than in its native habitat. Under these conditions it is still late-flowering—the blooming period begins in early September and lasts until cold weather begins in October. This is probably the latest flowering of all daylilies.

Conversely, while traveling along the seacoast near Tomioka, Ibaraki Prefecture, I found the common *H. longituba* Miquel blooming profusely on May 29. This is considerably earlier than the July-August flowering time reported for this species. Thus we have in our collections the earliest and the latest flowering daylily species plus material representative of summer flowering types. Even this advancement in our accumulation of breeding

stocks and knowledge is only a partial success for it scarcely touches on the variation of flower size and form existing in individual colonies of daylilies which inhabit Japan from south to north and from sea level to the mountain meadows.

A final observation on the woody plants of Japan concerns the general northward distribution of broadleaved evergreen species into environments seemingly beyond their range of adaptation. Certain plants occur in Hokkaido and northern Honshu and survive only because they grow as decumbent plants covered by snow during most of the winter. The most striking of these are the dwarf or decumbent forms *Aucuba japonica* var. *borealis*, Miyabe, *Daphniphyllum bumile* Maxim., *Ilex crenata* var. *radicans* Tatewaki, and *Skimmia japonica* var. *repens* Makino.

Whether these varieties will maintain a similar habit with little or no winter snowfall can only be determined by trial in less severe climates. Essentially, this will determine if these taxonomic entities are true genetic segregates or merely responses to local environmental conditions.

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Old Camellias in Germany

Dr. WOLFGANG KÖRNER

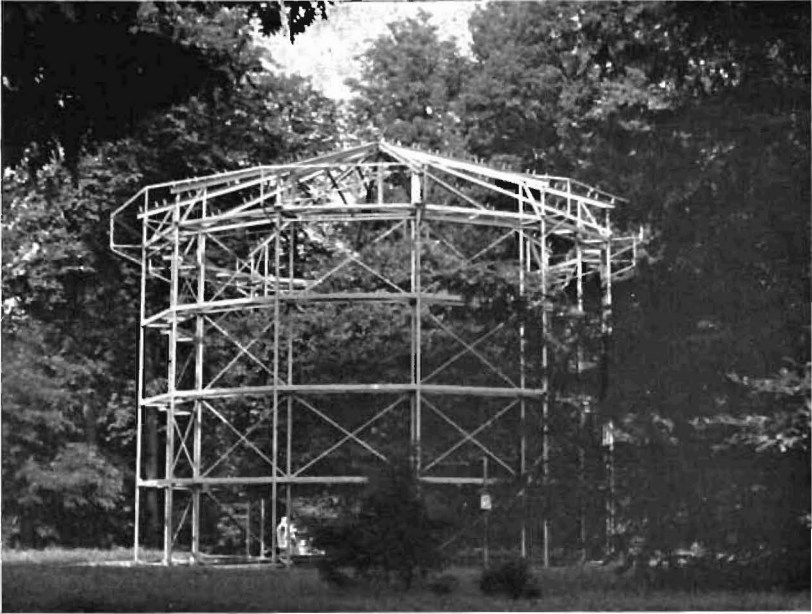
Markkleeberg

Germany

It must be made clear that camellias are not hardy out-of-doors in Germany and for this reason there are very few old plants. As camellias develop into large bushes they have to be removed from the glasshouses and replaced by young stock. The old plants which are in existence are therefore of great interest and value.

The most famous plant is the "Pillnitzian Camellia." This old specimen grows in the park of Pillnitz Castle, near Dresden and is known throughout Germany; very few visitors to Dresden fail to visit it. The history of the tree is known approximately. It came to Pillnitz in 1770, one of four plants which arrived in the gardens of the European Courts during the second part of the 18th century. They are said to have been a present from the Tsar and evidently the others were lost. Originally it was placed in the Orangery at Pillnitz Castle but soon out-grew its surroundings and in 1801 it was planted out in the park where it still grows today. In the first place it was surrounded by a wooden structure with glass windows but in 1950 the building was renewed by a glasshouse of modern design which is dismantled to the framework each summer. In winter a hot-water heating system is used to maintain the necessary temperature.

Every year in April and May the plant is covered with thousands of single red flowers, 5-6 cm. in diameter. The plant is now 9 metres high and 7 metres in diameter. It is growing in loamy soil, some 400 metres from the River Elbe and as will be seen from the illustration is slightly shaded by high trees. It is still vigorous and healthy and it is hoped that it will continue to thrive for many years. It is probably one of the oldest camellias in Europe.



The famous camellia at Pillnitz Castle.

The specimen at Pillnitz was regarded as the only old camellia in Germany until a few years ago, when three old camellias were found growing in an old glasshouse near Rosswein. I visited these plants in 1958 and identified two of the specimens as 'Alba Plena' but the third plant remains unknown. It varies from pink to red with deeper striation, and the flower is peony-form. It suffered a check during the building of a new glasshouse in 1961, which replaced an old house where the plants had been growing against a wall. This caused them to become ungainly and the wall has now been removed so that they stand in the centre of the new house.

There are no records of the age of the plants and it is difficult to estimate, especially as the growing conditions have been so poor for a great many years. I would suggest they are 120 to 150 years old. Today the plants are 5 metres high and 4 metres in diameter. They should improve in their new glasshouse as steps are also being taken to combat the camellia scale which has attacked them for some time. Last season 5000 people visited these camellias whilst they were in flower.

Today, camellia culture is concentrated near the cities of Dresden and Leipzig. Large quantities of camellias are produced each year from cuttings for indoor decoration during the period January to March. Almost 90% of the camellias offered are 'Elegans,' the next most popular being 'Lady Admiral Campbell Improved,' 'Alba Plena' and the cultivar we grow as 'Mathotiana.' The latter appears to be confused, for the German 'Mathotiana,' 'Mathotiana Alba,' and 'Mathotiana Rosea' are mutations of common origin.

'Bernhard Lauterbach' is a sport of 'Elegans' which originated in 1956 at the VEG Gartenbau der Stadt, Dresden, formerly the T.J. Seidel Nursery. It has pale pink flowers with a deeper centre and may be similar to the American variety 'C. M. Wilson.' Almost pure white flowers have also been produced on the same plant and these may equal 'Shiro Chan.'



Above: The unidentified camellia near Rosswein. **Right:** The old camellias near Rosswein.



The cultivar grown as 'Lady Admiral Campbell' is a single to semi-double pink which in recent years has been much used as a stock. It may well be a corruption of 'Lady Adelaide Campbell' which correctly should be called 'Rubricaulis' described by Sweet in 1818. My first record of 'Lady Admiral Campbell' is in 1831 at the F.A. Haage Nursery, Erfurt. 'Lady Admiral Campbell Improved' has larger foliage, deeper semi-double flowers and appears to be too different from the original to be a mutation.

I give below a list of some of the camellias which are grown in this region :

'Alba Plena'	'Herme Pink'
'Albertii'	'Helene von Wallenberg'
'Althaeiflora'	'Heinrich Seidel'
'Andre Spinola'	'Imbricata'
'Angela Cocchi'	'La Pace'
'Baronne de Bleichroeder'	'Lady Admiral Campbell Improved'
'Beaute de Nantes'	'Mathotiana'
'Bernhard Lauterbach'	'Mathotiana Alba'
'Berta Ravene'	'Mathotiana Rosea'
'C. H. Hovey'	'Maria Morren'
'Comte de Flandre'	'Madonna'
'Donckelarii'	'Nobilissima'
'Elegans'	'Princess Bacciochi'
'Emma'	'Rubricaulis' ('Lady Adelaide Campbell')
'Elena Nobile'	'Unica'
'Frau Minna Seidel'	'Variegata'
'Felicitas'	'*Variegata Perfecta'
'General Cialdini'	'Victoria Antwerpensis'
'Hikarugenji' (syn. 'Herme')	

*Probably 'Nagasaki'

C. reticulata

C. sasanqua

Exhibiting Camellias

C. W. LATTIN

California

U. S. A.

THE hours upon hours spent in watering - pruning - fertilizing - spraying - mulching and disbudding are past. The days of "toil" are over. At long last the time has come when I can go into my garden to pick a beautiful camellia flower—be it for a flower arrangement, a corsage or a camellia show.

With a tremble in my fingers—a lump in my throat and a flutter in my heart I know the job has to be done neatly - precisely - and very carefully. Just like a surgeon at an operating table—the job cannot be muddled—everything depends upon how I conduct myself in the next few moments. I approach the intended victim with a pair of sharp long nose clippers—carefully and softly I grasp it up and under the flower petals just above the calyx. As gently as possible I compress it between my thumb and forefinger so that I can hold it firmly yet without so much as the faintest bruise. To cut it off and let it fall face down in my hand is like the old days of the guillotine when heads rolled into a basket. Here I must steel myself—to make each move with precision, care and dexterity. This precision, care and dexterity eliminates scattered pollen, bruises, broken petals or shattered flowers. It is my pride and joy—I have pampered and fluttered about it

for weeks and now at the last crucial moment I cannot be careless—I cannot drop it—I cannot bruise it—it must be perfect in every respect. Clumsiness is inexcusable. Very carefully I insert the sharp clippers behind the flower—just at the right angle—the right distance—I can't be too close to the calyx, I can't be too far—it must be just right and then—I clip it off.

With my pride and joy in my hand, I heave a sigh of relief, sheath my clippers and with both hands very carefully place the flower on a bed of soft shredded paper which has previously been sprinkled very lightly with water. As I look down admiring God's handiwork—thinking it my own—my chest rises and falls with exultation—my fingers relax, the flutter around my heart has eased but, as I stealthily approach the next victim even though a little quieter—a little less nervous—there is still a throbbing in my temples. Oh God! What would I do if I dropped or bruised the next one? Some people say that the best and only way to kill a chicken is to wring its neck—flipping it around and around in a circle until its head is twisted off. I shudder to think of the bruises, the torn muscles and broken bones. Why, then I argue, do people twist off camellia flowers. Every time they move their fingers they chance a bruise—a fingernail scratch across a petal—a shattered flower which just could not take the rough treatment. If it has to be done let us do it with finesse.

In camellia shows where stems and leaves are permitted, or where a plant can be pruned as flowers are picked, I approach with a little less caution. In these cases the twig is firmly grasped between thumb and forefinger just below the flower and the stem is cut. Afterwards, depending upon its use, the stem can be cut again to the desired length. When flowers are between branches they must be held back in order to properly get to the flower.

With this as a premise let's go back to the time when the flower was cut and safely transferred to its bed of soft damp shredded paper. If you intend to use it in show competition the job is far from completed—if not, turn over the pages to the next article—you don't have to read any further.

To get a flower safely to a show, without so much as the pollen being scattered on the petals, is not luck. Instead, it is the result of careful planning, organizing, preparation and execution. Generally blue ribbons don't come easy—"Best of Show" or Sweepstake Trophies based on blue ribbons are that much harder, so I offer as a suggestion three steps I have found best to follow.

First step—Cross file card system

In my lath house all of my plants are numerically arranged and *not* in a hit and miss arrangement by name. Each variety regardless of name has a number starting with No. 1. For each of these variety numbers I have a 4 x 6 card prepared as below:

GUILIO NUCCIO						605
1	3	5	6	7	11	12

The reason for and the value of this card is fourfold:

- A. Two days in advance of a show—with cards in hand—I carefully check each variety for flowers. Each flower temporarily selected must be up to size for the variety. It must be in prime condition and perfect in all respects. Depending upon the number of "Show Type" flowers I check the classification at the bottom of the card with a soft pencil. If one flower is to be shown I check (1), or if three of a kind check (3), or if both check both, and so on. Still keeping the card in numerical order I go to the next variety that has or will have flowers open by show date. For those variety numbers on which there will not be any flowers I withdraw the card from file and place to one side—but keep it in numerical order.
- B. After the survey has been made I then retire to the comfort of my easy chair to make out the entry blanks. *I always prepare my entry blanks before show date and not at the show.* For each classification checked an entry card is prepared be it for one—three, twelve or all. After the entry card or cards for the variety have been prepared, I stick then on the check card with a small piece of masking tape in the space between the name and classification entry numbers below. The process is repeated for each check card.
- C. On the day I pick—I take my check cards with entry blanks attached—and make my rounds. As each flower is picked, and "easy does it" I lay them from upper lefthand corner to righthand in a picking box. A small $1\frac{1}{2}$ x $2\frac{1}{2}$ inch paper with the variety number written on it is carefully tucked alongside. I do not use the entry card. The single number is identification and "a must." It is much easier to write a number than a long name. I defy anyone to remember the names of 300 to 400 camellias without taking time—and time is at a premium at a show. Whenever possible I take along a "kicker" which is a second flower in the case of singles or an extra in the case of multiple entries just in case something happens to one en route. When one row is filled the next row is used and so on until the box is filled. In this way I have flowers in numerical order. Each picking box when full is numerically numbered. If an entry has faded, been bruised or the bud not opened enough the check card and entry blank can be laid aside. After all flowers are picked I take the boxes to my garage which has previously been converted into a sorting room. Around the perimeter of the garage I place light portable saw horses on which two 1" x 6" x 12' boards are placed to form sturdy racks for the boxes. The saw horses are 32" high thus permitting easy access to the flowers without having to bend over to the floor to get them. The boxes are arranged end to end, upper left corner to right, starting with No. 1. I use the garage because it is cool, it can be closed off to prevent draughts or drying air, and also I can "mess it up" without worry.
- D. Here in America blossoms are arranged on the tables alphabetically by the variety name. Singles, three of a kind, etc. are in separate classes and generally located in different sections of the show room. So, the 4 x 6 cards (with entry cards still attached) are then re-sorted alphabetically. Thus, in one sort all cards are alphabetized. It is then a simple procedure to take card by card and refer to the number - - check for the flower of that number in the picking boxes and transfer it *very carefully* to a transportation box in which it is to be carried to the show.

As each flower is placed in the transportation box the entry card is removed from the cross file card and carefully placed under the flower or flowers. By doing this all flowers are alphabetically arranged with their entry card for easy placement on show tables and there is no confusion in having to look for or make up an entry card. As each transportation box is filled it is numbered starting from No. 1—put in a stack—misted—and a top put on it immediately so as to retain the moisture. I keep my singles, 3s, 5s, hybrids, species and miniature entries in separate transportation boxes so the box numbers for singles will read 1-1, 1-2, 1-3, etc. or for threes 3-1, 3-2, 3-3 etc.

It is very important not to put too much water on the shredded paper. I do not sprinkle or mist any water over the tops of any white or blush pink flowers—it will “yellow them up” for sure. On others I stand about four feet away and use a very light application of fine mist spray.

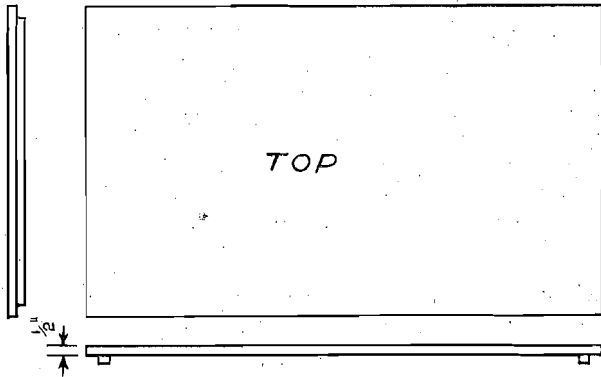
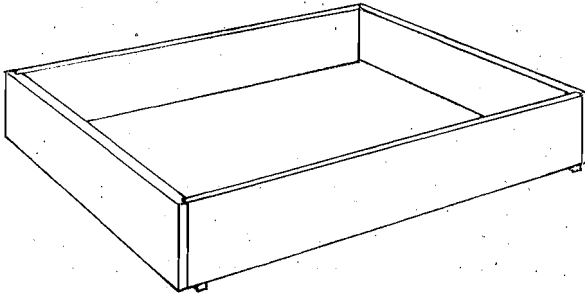
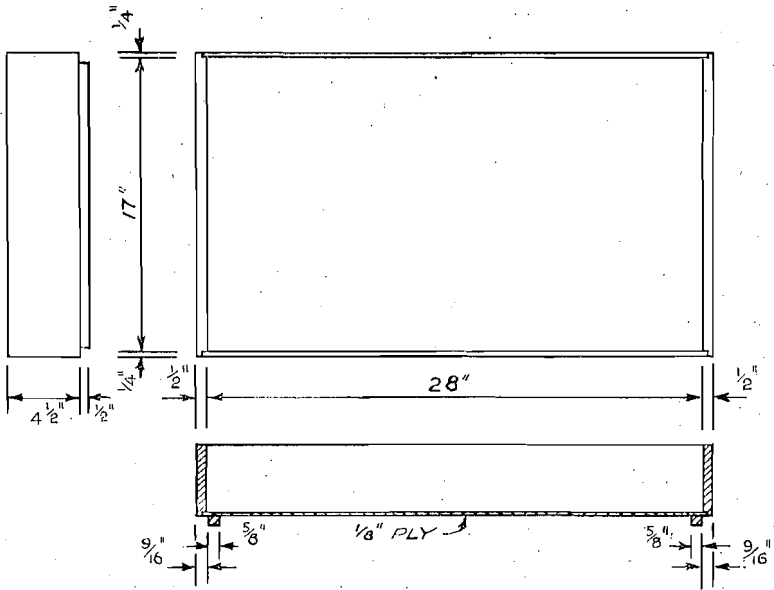
Second step—Picking boxes

Picking boxes can be almost anything. Strong corrugated cardboard boxes, preferably with a coating of parafine on the inside, are cheapest but wooden baker's bread trays are best. They should all be the same size and of sufficient quantity to assure proper placing of flowers so that none touch any other. They should be of proper inside depth (at least $4\frac{1}{2}$ inches) so if they are stacked the bottoms will not rub against the tops of flowers in the box below. Each box should have at least $\frac{1}{2}$ inch of $\frac{1}{8}$ inch shredded good bonded letter writing paper in the bottom. I choose this type of paper because it has sufficient strength and remains resilient for many hours even though dampened with water. Shredded newspaper or cotton are in my opinion—NO GOOD. They become soggy, pack down and give no buoyancy. Because I have a check on the number of flowers I will have, *these boxes in sufficient quantity, are all prepared (except for sprinkling) in advance of the day I pick.*

Third step—Preparation of flower transportation boxes

Here again advance planning is a must. After studying the problems over the last few years I believe wooden boxes, made as detailed on Page 55 are “the answer to the maiden's prayer.” If not the “maiden,” at least the competitor who has his desires set on blue ribbons, “Best of Show” or Sweepstake Trophies.

This box will hold fifteen 5 inch flowers and a larger number of smaller ones without touching. There are no hand holes as they admit air and tend to dry out the flowers. The ends and sides are made of a fine grained hardwood fitted tightly together with the $\frac{1}{8}$ inch plywood bottom. As diagrammed, there are two cleats on the bottom—one at each end to permit stacking the boxes and to eliminate any sliding. Anyone who has attempted, as I have, to take flowers to a show nearly 500 miles by automobile knows what a sudden stop or sharp turn can do. Boxes that are stacked and not kept from sliding fall and flowers are bruised. Around the perimeter of the bottom on the underside of each box I glue a $\frac{1}{2}$ inch strip of cork. When the boxes are stacked the weight of them against the cork makes them become air tight. The size and the inside height of your automobile will generally dictate the maximum number of lids required. I get two stacks of boxes in the trunk of my automobile and three on the inside, where the back seat has



been removed, so I need only five tops but I have three extras I use during the sorting. The tops are made the same way with cleats and cork stripping to make them air tight. For neatness, the boxes and lids are painted inside and out with a hammer tone grey plastic paint. The same type and quantity of shredded paper is used as in the picking boxes. To keep this paper from sliding from side to side, or front to back, I use fifteen 1 inch square patches of the ground cork placed in an equally spaced pattern so as to cover the bottom.

The cost of this box will vary greatly. You can make them out of wood, as I did, for less than one dollar each. If made on the outside they may cost as much as \$4.00 each. If made out of aluminium the cost would be considerably more. When storing boxes and tops in the off season I make sure that they are completely dried out. Then with the shredded paper (which I reuse year after year) still in them they are stacked absolutely flat so that they will not warp. In addition, the lids which are placed on top of the stacks are weighed down.

One last little trick or precaution. I went to a salvage store and bought ten pieces of 3" x 4" x 1/2" foam rubber. Two of these are put under each stack of transportation boxes in the automobile. Road bumps are greatly reduced—my flowers actually ride on air. On one of our 1000 mile round trips I brought back some of the "kickers" to use in another show and they arrived in excellent condition.

When we reach the show location, be it around the corner or 500 miles away, one of the most important things to remember is that flowers should not be exposed to sun, winds or drying drafts while they are waiting to be placed on the tables. We immediately take our transportation boxes out of the automobile and stack them so as to keep them air tight, in a cool place, near the exhibition tables.

In placing the flowers it is best to work in a two man team. One to bring the transportation boxes, as needed, to the other as he is placing the flowers on the tables and to take them away when empty. This cuts down considerably on the confusion in the number of boxes being worked on and also insures proper alphabetical placing. As I said a moment ago—when we place our flowers in the transportation boxes they are alphabetical as to variety and the boxes are numbered starting with number one which saves much time by not having to jump around the tables from A to Z.

It is well to always have a soft camel's hair brush with you, a pair of long nose tweezers and a light weight transportation cart. The cart permits the person placing the flowers on the tables to have a place to set the transportation boxes so that he does not have to juggle them in one hand and place the flower and the entry card with the other. Occasionally some pollen or dirt will fall upon the petals. The soft camel's hair brush is a great aid in removing such items. The tweezers are used to pull out damaged stamens and petaloids. I do not take a chance on trying to pull them out with my fingers.

In most competitive camellia shows the judges are not permitted to touch the flowers and therefore it is necessary that the competitor place his flower on the table to its *best* advantage. Place it in the container so that it will

look up directly at the judges and not to one side or away from them. In those shows where leaves and stems are permitted it is well to carry a small pad of absorbent cotton which has been lightly saturated with a very light oil. With this cotton you can clean the leaves as you place the flower.

By using this type of coordinated team work my wife and I have placed over 400 flowers in less than 2½ hours.

After all is said and done it can readily be seen that in competing for the "Best of Show" or trying to take the Sweepstakes Trophy your work must start many months before. The proper care of your plants including watering, fertilizing and pruning must be religiously adhered to. You must disbud properly—leaving only those buds which will open without damage caused by other leaves or twigs. Leaves that are in the way can be removed or pinned back with clothes pins or tape. Protect your flowers from rain and winds if at all possible—whether it be in a glass house or in other protected areas.

Proper planning must be done in advance so that *all* facilities will be available at the time you start picking, packing, transporting and placing your flowers. Sufficient facilities are especially necessary when large numbers of flowers are to be handled and transported. Of course, if there are only one or two flowers or just a few to be considered that is a different situation, but where one goes "all out" for Sweepstakes, planning, organizing and controlling is absolutely necessary.

In this article I have tried to explain how my wife and I go about competing in a show. Many will disagree and say what a lot of nonsense but if proper arrangements are made and sufficient care is taken you too will undoubtedly be able to point to many blue ribbon flowers and say with justifiable pride, "that is mine."

Camellia Culture in Australia

WALTER G. HAZLEWOOD

New South Wales

Australia

AUSTRALIA has an area nearly as large as Europe or the United States and naturally has a very varied climate. Being an island continent, with some thousands of miles of sea between it and the South Pole, it does not suffer the freezes which often affect the Southern United States or Southern Europe. On the other hand, the interior is subject to intense dry heat with hot winds periodically throughout the summer. These conditions also influence, but not to the same extent, the coastal area from Perth to Melbourne. The northern part of the continent is tropical and therefore not suitable for the growing of *Camellia japonica*, except in mountain areas such as the Atherton Tablelands in North Queensland. However, *Camellia sasanqua*, *C. hongkongensis* and other species which come from similar climates should succeed.

Camellia sasanqua does very well in many of our inland areas providing that water is available. *Camellia japonica* can also be grown but some shelter is necessary as protection from the hot winds and the intense heat. This can be provided by what is called a "bush house" in Australia or a "lath house" in the United States, which breaks the rays of the sun and minimises the effect of the heat. In our mountain districts, *Camellia sasanqua* grows vigorously but is often not very floriferous. 'Minenoyuki' seems to give the best results, but some of the modern cultivars may succeed equally well.

The mountainous areas which are influenced by coastal conditions grow *Camellia japonica* very well without any protection although the blooms are liable to be damaged by frost and for this reason it is better to grow the late flowering cultivars. In the mountains further away from the coast, the frosts do more damage and some protection is needed to obtain good blooms. In the Snowy Mountain area, it is doubtful if camellias could be grown except under glass. The coastal belt from Melbourne to Perth grows camellias very successfully in the open although better results are obtained where some shelter is provided. Here too, there is some liability of frost damaging the blooms and again the late flowerers are best.

The coastal region extending from Gippsland in Victoria, up the New South Wales coast to about 300 miles north of Sydney, I consider to have one of the ideal camellia climates of the world. Warm humid summers with mildly cold winters. It is rare to get a hot wind and heatwaves seldom last more than three days and only average one each summer. By a heatwave I mean the intense dry heat from the interior, with the temperature over the hundred mark even up to 110°F. or more. February is a month of humid tropical heat but camellias thrive under such conditions, and bloom for eight months of the year. *Camellia oleifera* and *C. sasanqua* 'Mikuniko' usually start to flower about the end of January and the bulk of the sasanquas are in full bloom by the end of March and continue until June. 'Showanosakae' commences in early March and still has flowers in September.

It is unusual for camellia blooms to be damaged by frost in this area and for this reason I always recommend planting early flowering cultivars of *C. japonica*. Towards the end of March the first japonicas flower, 'Yoheihaku,' 'Hassaku,' and 'Daikagura' being the earliest. This year due to the cool summer they had their first flowers on March 11th, but in normal years they are about two weeks later. Our flowering season finishes about the end of September or if the weather is cool it will continue until the end of October. I have even seen odd blooms at Christmas but these could not be considered quality flowers. Some of the early flowering types may have flowers for five months, but the later forms only last for two or three months at the most for the heat will not allow them to open. One extreme case 'Nivalis' which does not open until October, practically never develops a full bloom, but would probably be quite worth-while in our mountain districts.

Camellias can be grown in any type of soil, providing the drainage is good and not too mineralised. I have a friend who grows *Camellia sasanqua* well on limestone soil but he cannot get results with *C. japonica*. Much of our inland water contains salt and other minerals and here it is necessary to use rain water, as the constant application of water with a heavy mineral content often builds up so much alkalinity in the soil that camellias cannot survive. For sandy soils it is necessary to keep a mulch on the surface, partly for

coolness and partly for evenness of moisture and if the mulch is of animal manure, it provides the necessary nourishment for the plant. Clay soils with practically no humus content should have this mulch added; or, alternatively a quantity of soil should be removed and replaced with a more kindly medium. Care should be taken not to dig too deeply and so create a place that will hold water. A mulch on the surface gradually rots away and makes a layer of live soil containing the needful bacteria for successful plant life.

When planting do not set too deeply but have the top of the ball about two inches below the surface. Should the ball be a large one and the soil shallow, unravel some of the bottom roots and also remove an inch or two of soil from the top if possible. The ball must be moist before planting but it is inadvisable to put water in the hole. Firm the soil around the plant and cover the top of the ball to a depth of one inch. The surplus soil should be banked up to form a basin and kept in this way throughout the first summer. By having a hollow the plant is assured of ample water during the hot weather for by filling up the "dish" when necessary the plant gets water right down to the bottom roots. A mulch in the basin helps to prevent the surface setting hard. After the first summer the soil can be levelled.

After care consists of keeping the ground clear of weeds and seeing that the camellias do not suffer from lack of moisture particularly just before the two growing seasons, which in Australia are August and January. Camellias in their young stages should be tip pruned to encourage bushiness, by this I mean taking off only the tip of the shoot just before the new growth is due. When the plant has reached a good size I like to give it a light pruning after flowering, as this tends to keep it shapely. An old plant which starts to develop dead wood calls for drastic cutting back, removing all minor branches so that only the thick ones are left. Do this after flowering and see that the plant has ample food and moisture to encourage a healthy young growth.

Camellias do not suffer from many diseases in Australia. Some scale insects attack them but these are easily controlled by spraying. Mites and thrips are other pests but Rogor 40 spray soon cleans them up. Exobasidium sometimes appears, particularly on *C. sasanqua* and if only a few leaves are infected these can be removed and burnt, but if there are many of them, spray with one of the copper fungicides. I believe that Die-back is a result of over-acidity tying up molybdenum in the soil. Scorching of the edges of the leaves is probably due to the same cause. A light dressing of dolomite lime soon corrects these conditions.

The forms of *C. reticulata* are more or less collectors' items. They have glorious blooms but their foliage is dull, their habit ungainly, and their flowering season short. Now that we are receiving the larger flowered japonicas such as 'R. L. Wheeler,' these will provide more attractive plants with flowers approaching the size of *C. reticulata*.

I give below a list of the cultivars of *C. japonica* and *C. sasanqua* which are most favoured in Australia.

Camellia japonica

'Adolphe Audusson'	'Kumasaka'
'Alba Plena'	'Lady Clare'
'Alexander Black'	'Lady Loch'
'Alexander Hunter'	'Leila'
'Amanokawa'	'Leviathan'
'Aspasia'	'Oniji'
'Azurea'	'Otahuhu Beauty'
'Chandleri'	'Paolina Maggi'
'Cho-cho-san'	'Peach Blossom'
'C. M. Hovey'	'Prince Eugene Napoleon'
'Daikagura'	'Prince Frederick William'
'Edith Linton'	'Roma Risorta'
'Elegans'	'Shiragiku'
'Emperor of Russia Variegated'	'Speciosissima'
'Eugène Lize'	'Spencer's Pink'
'Fimbriata'	'The Czar'
'Frau Minna Seidel'	'Thompsonii'
'Great Eastern'	'Thompsonii Rosea'
'Great Western'	'Tokinohagasane'
'Hagoromo'	'Virginia Franco Rosea'
'Hanafuki'	'William Bull'
'Hatsuzakura'	'Winter Cheer'
'Hikarugenji'	

Newer Introductions

'Beauty of Holland'	'Madame Hahn'
'Blood of China'	'Martha Brice'
'C. M. Wilson'	'Mrs. Charles Cobb'
'Crepe Rosette'	'Patrician'
'Coquettii'	'Pax'
'Emmett Pfingstl'	'Red Ensign'
'Firebrand'	'R. L. Wheeler Variegated'
'General George Patton'	'Sara C. Hastie'
'Governor Earl Warren'	'Shiro'otome'
'High Hat'	'Strawberry Blonde'
'Laurie Bray'	'Yukibotan'
'L'Avvenire'	

Camellia sasanqua and allied species

'Fukuzutsumi'	'Setchuka'
'Hi'odoshi'	'Setsugekka'
*'Hiryu'	'Shichifukujin'
'Lucinda'	'Shishigashira'
'Minenoyuki'	'Showanosakae'
'Onigoromo'	'Taimin-nishiki'
'Narumigata'	'Violet Weymouth'
'Plantation Pink'	

* The cultivar incorrectly known as 'Hiryu' in Australia

Hybrids

'Brian'
'Clarrie Fawcett'
'Donation'

'E. G. Waterhouse'
'Lady Gowrie'
'Margaret Waterhouse'

Why seal your Grafts?

STEWART C. FORBES

Georgia

U. S. A.

AN ounce of prevention is worth a pound of cure. Yes! We have all heard that old adage and we believe it, but we don't always follow it, do we?

In camellia grafting and in other cultural practices, we tend to emphasize corrective measures and complicated treatment for conditions that could and should have been avoided in the first place. It is comparatively easy to convince a camellia enthusiast, whose plants show definite and obvious signs of distress, that immediate corrective measures are called for. On the other hand, unseen or unsuspected things like fungus spores seem too remote to warrant consideration.

In the milder climate zones where camellias flourish, these fungus spores usually abound, unseen but insidious, ready to go to work on any injured and exposed plant tissue. Most camellia growers are well aware of the dangers of untreated pruning wounds and are prepared to dab pruning compound on the smallest of cuts. It is amazing that so few of them regard the damage caused by grafting in the same light.

When the understock is cut and split, ready to receive the scion or scions of the cultivar we have been anxiously waiting for, a large area of plant tissue has been exposed. The proximity to the ground makes this an ideal situation for the entrance of wood destroying fungus spores, harmful bacteria and even termites. Bark performs a function very much like our skin; it is a protective covering and should be treated and repaired when broken or cut. A grafting-size wound on our skin would certainly receive prompt attention; why not give the same solicitous consideration to our plant friends? It only takes a few seconds to properly seal a graft, so the time element is not the determining factor.

Before discussing grafting compounds and their application, it might be well to consider a few grafting practices that are questionable. It is very true that a lot of grafts grow in spite of what some people do and not because of it.

Camellia grafting is comparatively easy if you know why you are doing it but an alarming number of grafters continue to "rock" the scions, even to 45° extremes. This is a distinct violation of grafting principles and a sad lack of confidence on the part of the persons doing it. Their claim of course is that the cambium of scion and understock must cross somewhere along

the line. Little do they realize the microscopic dimensions of cambium cells. In cleft grafting, the cambium of scion and understock should be matched all the length of the outside cut on the scion. With just a little more care, this isn't too hard to do and it results in faster healing and better vegetative growth.

Another questionable practice is the grafting of too many plants before taking time to cover the grafts. Scions are usually well protected in polyethylene bags until grafted and then left fully exposed to the weather for long periods before they are covered. Everyone knows that grafts must be covered, but it is important to cover them as quickly as possible.

In covering grafts, it is also important to provide for some transmission of light to the scions. Direct sunlight must be excluded, but a cover that is completely impervious to light is equally harmful. Photo-synthesis requires light and cannot function in complete darkness. Some translucent plastic containers are being successfully used, but so are cardboard containers that exclude all vestige of light. If these containers have a V-shaped notch cut in them and are then covered with a polyethylene bag it would be better. Any cloche should be large enough to accommodate the scions without crowding the leaves. Burlap squares or baskets over glass jars will provide protection from the direct rays of the sun, but an opening should be left on the north side.

Grafts should be sealed as soon as completed. Recent tests have proved conclusively that emulsified asphalt incorporates all the desirable qualities of an ideal grafting compound. It is available as a thick paste and should be thinned with water to the consistency of thick cream. The use of FERBAM or CAPTAN in the water used for thinning offers some added protection from mould and other organisms. A thin flat stick or pot label about one half inch wide and whittled to a thin, flexible, square edge is the best applicator and is easily kept clean.

All exposed surfaces of the understock should be completely covered with a reasonably thin coating of the compound, making sure that the cleft between the scions, if two are used, is completely covered. If the cleft has been deep, to accommodate a thick scion, there may be a small cavity at the lower end of the scion. It is important to seal this opening properly.

Sealing grafts will not guarantee better takes if the scions have been improperly placed in the understock. It is a preventative measure and good horticultural practice. If the scions have been inserted correctly, you may expect better healing if the graft has been sealed, because protected callus will remain softer and travel faster. When a graft for any reason fails to take, the understock is more apt to be in a re-usable condition for future grafting if it is properly sealed.

It is not necessary or advisable to mound up around the graft with soil, sand or vermiculite if the graft has been properly sealed. It is especially bad practice to mound up around the graft when it has not been sealed because it creates optimum conditions for the entrance of fungus spores ever present in the soil. Many well meaning people wait until the graft has taken and been uncovered before applying a seal but it could very well be too late then. Fungus spores sealed up inside the cleft can continue unhampered if the sealing is delayed.

Just a few remarks on procedure after grafting and sealing. The grafts should be covered promptly with a glass jar or other acceptable container, with an opening for light towards the north side which also allows the progress of the graft to be checked.—Experience has proved that as soon as actual growth has begun, it is better to remove the jar, but climatic conditions are important for an abrupt transition from darkness to light can be fatal and a cloudy day should be chosen. When considerable growth has taken place, gradual hardening must be resorted to by raising the jar a little at a time with wood slats or bricks. A fine fog mist sprinkler will help to maintain the humidity around exposed grafts and minimize wilting.

It is close attention to the little things, that we all know about that spells the difference.

Painting Camellias

PAUL JONES

New South Wales

Australia

PAINTING camellias has not been without its many and varied problems and being engrossed in this particular and rather specialised occupation for a good many years, my regard for these irresistible and extremely paintable flowers seems to intensify rather than wane as might be expected.

"Do you ever tire of painting camellias?" is the ceaseless query to which at this stage, I might reply, "Certainly I am not tired of camellias and I am even less tired of painting." I feel, in fact, so strongly about both that the fusion of the two has now become automatic and I shall therefore continue if, to my mind, the ultimate is to be achieved, whatever that may be.

Having observed countless varieties in many camellia areas in the world, Europe, Japan, United States, and Australia, my attitude towards these highly favoured flowers might be assessed in terms of whether or not a variety is paintable, according to my particular methods. This has influenced my opinion to such an extent that if a variety is unpaintable, then it has little attraction other than for its history and nomenclature, which to me have now become very much an additional interest.

A paintable camellia must have a decisive form, styling and an individual personality. Bereft of these qualities, despite size and colour, there is no message. 'Tomorrow' is an example and is a very unpaintable camellia; in fact many of the newer varieties lack these features and have little to offer to me as a painter.

Another much worked question, "What is the most difficult camellia you have ever painted?" An intriguing speculation and I wonder myself. 'Hagoromo' ('Magnoliaeflora'), however, somehow comes to mind as having tried my patience and with very unsatisfying results. Of all the hundreds of "sitters" to which I have been assigned, this enchanting little camellia with its exquisite styling and elusive colour, seems, more than any other variety I can recall, to defy any attempt to arrest its haunting loveliness. The most

satisfying on the other hand are 'Hanafuki', 'C. M. Wilson', 'Lady St. Clair', 'Pukekura', 'Aspasia' (and its mutations) and *C. x williamsii* especially 'Lady Gowrie'.

Densely petalled forms require very close attention, but are not oddly enough the most difficult. The singles, modest and simple, make less demands on the wits, but somehow are the most challenging of all. These "quietly-spoken" blooms make no attempt to vie with their more showy relations, yet they emanate an elegance and simplicity which is immediately appealing, though difficult to arrest.

But the great challenge lies ahead—the higos—spectacularly decorative, they beckon, and I know that there will be no rest until I can return to Japan to work on a series of portraits of these stately and beautiful camellias which have yet to bewilder and excite camellia lovers throughout the world.

Painting a camellia can be likened to describing a personality, and if an accurate statement of its salient characteristics is to be achieved, a thorough knowledge of the particular variety is essential. The perfect form representing the cultivar to be painted must be found and this quite often involves much patience, since the plant does not always oblige at one's convenience.

Designing the arrangement sometimes requires numerous small drawings beforehand, as a desirable branch straight from the bush is seldom available. The arrangement of the blooms and foliage must be placed to suit the picture and not necessarily as nature dictates, but attention must nevertheless be paid to certain botanical demands for obvious reasons. Regarding colour my preference is for the whites and blush pinks, as they represent pure form without the disturbing attraction of colour. It could be that my interest in camellias is concerned with form rather than colour, for it is to me the more distinctive and fascinating aspect of the flowers.

And so back to work. The rest is easy—intense observation, careful and clear pencil delineation, undivided concentration for ten to fourteen days, and then end up with the feeling that you could have done better.

The Ninth Annual Festival organised by the Camellia Festival Association of Sacramento, California, will be held on March 1-10, 1963. The "Camellia Capital of the World" will go gay with camellia parades, balls, and the 39th Annual Camellia Show, sponsored by the Sacramento Camellia Society.

The Royal Horticultural Society's Camellia Competition has been arranged for April 18-19th, 1963. It will be held as usual in the Society's Hall, Vincent Square, London.

Camellias for the Delaware Valley

THE innate tendency of gardeners to try to grow plant varieties that they are told will not do well in their climate has been the source of many wonderful discoveries. Such is the case of *Camellia japonica*, the spring blooming camellia. A few years ago it was grown and flowered outdoors in Yonkers, N. Y. for the first time. Although still very much in the experimental stage, the facts have been established that varieties of *Camellia japonica* vary in hardiness and that the plant itself is more tolerant of low temperatures (-15° F.) than are the flower buds (10° F.). Many northern gardeners are enjoying their own camellia blossoms in at least four years out of five. Older, well established plants, incidentally, have greater resistance to cold than very young, recently planted ones. It appears that it takes a plant as much as two to three years to adjust its flowering date to the late spring season in the north.

Location is very important. Camellias should be protected from the sweep of wind. They also should be protected from the morning sun in winter, because the fast thawing of frozen tissues damages flower buds. Some light, but not necessarily direct sunlight, is necessary for bud formation, and protection from the hottest sun will produce lush, dark green foliage. A western or northern exposure, with wind protection, is about ideal, unless you happen to have a space lightly shaded by high-branched evergreens.

Culture

Camellias require a well drained, acid soil containing plenty of organic matter. Plant in the spring and be sure to set them at the same depth at which they were growing in the nursery. After the first year, feed with a balanced, acid, organic fertilizer, such as one used for hollies, rhododendrons and azaleas, in very late fall (late November, early December), in early spring and, a third time, in June. Do not feed later than June since this could stimulate late growth which would not be mature enough to withstand low temperatures.

Probably the most important factor in the successful culture of camellias is an adequate water supply, especially in June and July when flower buds are forming. It is wise to mulch well with pine needles to conserve moisture. In September, allow the plants to remain on the dry side to encourage hardening of the stems and foliage. During the winter of 1960-61, camellias which were sprayed with Wilt-pruf appear to have suffered less damage than those which were not sprayed. Apply Wilt-pruf in November and again in February when air temperatures are above freezing.

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Prune camellias after blooming in May. Remove weak, inside branches to provide good air circulation, and shape the plants to help them withstand snow load in winter. Where buds form in clusters, remove all but one to improve the size and quality of the flowers.

Varieties

Generally speaking, varieties which flower from mid to late season are recommended, and the list of those proving to be hardy is growing each year. Of the more than six hundred in cultivation, the following varieties do well in the Delaware Valley area:—

C. japonica varieties: 'Blood of China', the cultivar currently called 'Mathotiana' in the United States, and 'Elegans' are red; 'Marjorie Magnificent', 'Reverend John G. Drayton', 'Kumasaka', and 'Berenice Boddy',* are pink; the cultivars currently called 'Tricolor White' and 'Tricolor' in the United States; and the variegated varieties 'Hikarugenji', 'Dr. Tinsley',* 'Ville de Nantes' and 'Elegans Variegated'.

It is important that the spring blooming *C. japonica* should be distinguished from the fall blooming *C. sasanqua*. The fall blooming camellias generally produce smaller flowers but in greater profusion. Varieties which bloom early enough to escape hard frosts should be chosen since *C. sasanqua* buds are killed at temperatures below 18° F. The plants are hardy to 0° F., and although occasionally damaged by low temperature, they recover quickly the following season. An eastern exposure is recommended for *C. sasanqua*.

C. sasanqua varieties: 'Jean May', light pink; 'Rosea' and 'Sparkling Burgandy', deep pink; 'Setsugekka', white.

* Varieties which survived the severe 1960-61 winter particularly well.

Kenneth M. White, Hazelhurst, Blackpool Corner, Axminster, Devon, England, a keen hybridist, suggests that a scheme to distribute the pollen of the less common camellia species and cultivars would be very helpful. Mr. White is particularly anxious to have pollen of *C. granthamiana*. (What do other hybridists think of this idea?—Ed.)

Mr. Richardson, Park Close, Englefield Green, Surrey, suggests that there should be a meeting of members of the Society and kindly offers to provide accommodation for such a meeting at his home which is thirty minutes by train from Central London. Will members interested in this proposal please contact the Secretary.

Notes to Newcomers

GEOFFREY R. WAKEFIELD

Sussex

United Kingdom

A NEW society, a new journal, new readers and perhaps, some who are planting camellias for the first time. For the old hands with years of planting experience, having gardens full of flourishing plants, this article is a "must,"—to be missed. For the newcomer to these lovely plants, "Welcome," and may these notes help you to establish yourselves amongst the best.

In all branches of horticulture one repeatedly hears the admiring remarks, "How do you manage to grow them so well?" The plain straightforward truth is that usually the plants have grown themselves. The proud owner has merely provided conditions best suited to his favourite plant. To understand the requirements of the camellia fully we must take a look at them in their native home. This is mainly the Far East and in the case of *C. japonica*, with which we are concerned at the moment, Japan. Here they flourish over a wide area, also on the off-shore islands and as far north as Kominato, Honshu, which is in Lat. 40° 55' N. and where winter temperatures of -5° F. are recorded at times. They grow as under shrubs and small trees on hillsides where good rainfall maintains adequate soil moisture yet where there is good drainage of excess water. The roots enjoy good deep, cool penetration which helps maintain moisture during drought. The cover trees provide an annual mulch of humus material whilst animals, birds and insects help with fertilising. The soil in these areas is usually of acid reaction.

Of first importance is the preparation of the ground. Ideally the site should be in semi-shade on well drained, rich loam of about pH 5. The whole of the site should be double dug, the subsoil broken and leaf mould and peat worked in. If your site is wet and heavy, drainage sumps into, or even through the subsoil must be dug. Where there is sufficient slope, subterranean drainage channels of broken brick or clinker can be made to take off excess water. The texture can be improved by working in plenty of humus material such as sedge peat, forest peat, leaf mould or well rotted, strawy stable manure, but avoid wet vegetable compost or wet manure. If the site is light sandy soil, soil moisture must be maintained by again incorporating plenty of the above materials together with certain vegetable composts or even sawdust. Anything to retain moisture. Further, heavy mulching will help considerably in this respect. Where the soil has a pH reaction of 6 or above, applications of one of the proprietary acidifiers can be made according to maker's instructions. Where there is no shade, cover plants should be put in, or either a wall or lath shelter utilised. Fertilisers can be used to enrich the soil even further but this can be a risky business for the beginner as such a mysterious miscellany of materials are now sold with wild claims printed on

the labels. If you feel you must use a fertiliser, use one of the gentle, slow acting types such as bone meal, hoof and horn meal, or perhaps a little dried blood or fish manure.

The most satisfactory plant it is possible to buy is the pot or container grown plant. The roots are intact, they can easily be inspected for signs of ill-health or ill-use, the plant suffers no shock from root damage and it can be handled at any time of the year. Certain inter-state and international regulations stipulate washing clean of soil before a plant is imported or exported. This is called bare-rooting, and is a very considerable shock to the plant with a result it takes many weeks of careful nursing before health is restored. Another system is to lift the plants from the open nursery, wrap the root ball in sacking or burlap and despatch with the soil on. This is called balled, or balled and burlapped, or B/B. When the plants are going to be planted during the autumn so that they have the whole winter to make new roots before the summer, this can be quite a good system. It is most essential to buy from a really reputable nursery where they practise annual transplanting in the nursery to ensure a good tight root ball. It is possible that these will be more expensive than the cheap-jack stuff but well worth it. Fellow camellians or society members will be happy to recommend good local nurserymen to you. The nurseryman will welcome this as he has only the health of the plant at heart, together with the satisfaction (and future trade) of the customer. For the moment let us assume that you have a nursery in your state or country where you can get container grown plants.

When you receive the plants, unpack them carefully, noting any damage done in packing or transit. If this is severe, let the nurseryman know as he may want to replace the plant and claim from the railway or haulage contractor. See that the plant is well watered and if very dry, plunge the root-ball, pot and all into a bucket of water until thoroughly soaked through again. See that all labels are in place, nothing is worse than not knowing if the plant is 'Adolphe Audusson' or 'Zoraide Wanzi'.

The hole for the plant is taken out rather larger than the container, and a lining of leafmould and peat put in. The plant is very carefully removed from the container and the drainage crocks removed. If these are so grown in that it is impossible to get them out without breaking the roots, let them be, they will do no real harm. The plant is now placed in the hole and the lining material worked round the root-ball, and firmed by a light treading. Tread again lightly and make tidy. Lastly cover the ground to an area of at least double the diameter of the original container with a mulch of leafmould or peat, or both. Water the plant and surrounding soil well if necessary and fix a permanent label. A stake may be necessary for tall plants grown in exposed areas. One last tip, many plants are lost through deep planting. A good guide is, plant to the same level as the plant was in its container or in the nursery. Watering must be attended to during dry spells and frequent overhead spraying is most beneficial if applied during dull periods or late evening.

Well there it is. You have prepared the site, planted your first camellia. Now Brother, you're a Camellian. Good luck! Next time we will discuss after-care and imported plants.

Societies

One of the motives of the Society is to co-operate with all national and regional camellia societies and with all other horticultural societies. Several of these societies are listed below together with details of their annual publications. Information concerning other societies and particulars of activities and publications will be appreciated.

American Camellia Society.

President: C. W. Farmer.

Executive Secretary-Editor: Joseph H. Pyron, P.O. Box 465, Tifton, Georgia.

Subscription: \$6.00. Publications: Five issues of *The Camellia Journal* plus *The American Camellia Yearbook* published each December.

Australian Camellia Research Society.

President: E. G. Waterhouse.

General Secretary: T. J. Savage, 141, Prospect Hill Road, Canterbury 7, Victoria.

Subscription: 21/-. Publications: Three issues of *Camellia News* plus enlarged *Camellia News and Annual* each December, edited by E. G. Waterhouse & T. Parramore.

Japan Camellia Society.

President: Kiyoshi Ishikawa.

Secretary: Mrs. Yasue Ishii, 290, Omiyamae-5-chome, Sugunami-ku, Tokyo.

Subscription: 500 Yen. Publication: Booklet issued three times a year.

New Zealand Camellia Society.

President: W. M. McFarland.

General Secretary: Miss P. M. Bates, 14, Anglesea Street, Hamilton.

Subscription: 15s. Publication: Three issues of the *New Zealand Camellia Bulletin* edited by T. Durrant.

Northern California Camellia Society.

President: Kenneth C. Hallstone.

Secretary: George P. Neilson, 3184, Meadowbrook Drive, Concord.

Subscriptions: \$5.00 (\$3.00 outside Northern California). Publication: Four issues of *The Camellia Bulletin* edited by David L. Feathers.

Oregon Camellia Society.

President: Col. Claud Farrow, Jr.

Secretary: Mrs. Douglas W. Polivka, 2428 SW 19th Avenue, Portland 1.

Subscription: \$2.00. Publication: Twelve issues of mimeographed bulletin edited by Walter F. Neubert.

The Royal Horticultural Society.

President: Lord Aberconway.

Secretary: J. Hämer, The Royal Horticultural Society, Vincent Square, Westminster, London S.W.1.

Subscription: 42/-. Publications: Twelve issues of the *Journal of the Royal Horticultural Society* (deals with all branches of horticulture) and *The Rhododendron and Camellia Year Book*. (Price 12/6) edited by Patrick M. Syngé.

South Carolina Camellia Society.

President: Carroll T. Moon.

Secretary-Treasurer: Paul D. Rush, 610, Columbia Avenue, Lexington S.C.

Subscription: \$3.00. Publication: Three issues of *Carolina Camellias*, edited by John H. Marshall.

Southern California Camellia Society.

President: A. Wilkins Garner.

Secretary-Treasurer and Editor: Harold E. Dryden, 820, Winston Avenue, San Marino.

Subscription: \$6.00. Publications: Six issues of *The Camellia Review* and a bi-ennial revision of *Camellia Nomenclature* edited by William E. Woodroof.

Texas Camellia Society.

President: L. C. George.

Corresponding Secretary: W. F. Barbish, 3919, Riley, Houston.

Subscription: \$4.00. Publication: Bulletin edited by Louis Squyres issued four times a year.

Book Reviews

Camellias By E. B. Anderson, 115pp. Illus. Blandford Press Limited, 16 West Central Street, London W.C.1. 12.6d.

This is the first handbook of its kind to be published in Great Britain and it should do much to encourage the increasing interest in camellias. It is essentially a publication for the keen amateur, but is also a useful guide for the nurseryman to see which cultivars are likely to be asked for in future years.

It is pointed out that no single species of tree or shrub has given rise to so many cultivars. Perhaps the Lilac is a poor second. The opening chapter devoted to the history of the camellia is full of interest; we are told that as many as a thousand different varieties of *Camellia japonica* were offered by European nurserymen as long ago as 1861.

In the chapter dealing with wild camellias we are reminded that *C. japonica* varies in its wild state from a bush 3ft. high at its most northerly area to trees 30ft. to 40ft. high in more favoured localities, and that in some parts it is subjected to a winter frost of 37°F.

Camellia cuspidata does not receive much praise. I find this an attractive and hardy evergreen, and whilst the small white flowers are not very conspicuous for a camellia, the unfolding leaves are an attractive bronze colour. All the species of camellia that can be grown out of doors in the British Isles, and their hybrids, have received brief but well balanced comment.

There is an interesting remark made on the choice of site for planting. We are told that in the colder parts of the north of England and Scotland some sun is necessary if the plant is to produce flowers. It would seem that wherever a moist root run can be combined with sun, such a position should give maximum flowering. The chapter devoted to cultivation is obviously the work of a skilled, practical gardener and should prove the greatest assistance to all who wish to succeed in growing camellias. Propagation is dealt with and will no doubt encourage many beginners to reproduce those sorts which give them greatest pleasure.

When writing about cultivars, Mr. Anderson describes the classification adopted by the Royal Horticultural Society, which will give guidance to those who hope to exhibit at Flower Shows. In addition to giving a very comprehensive list of camellia cultivars generally available in Great Britain, the author has submitted his first choice of sorts. Since the possible selection is now so enormous, it is a great help to have guidance in making a balanced collection.

This book certainly fills a gap which has for long existed on the bookshelf of the amateur gardener.

H. G. HILLIER.

Studies on Snow Camellia (Camellia rusticana) by Kaoru Hagiya & Susumu Ishizawa. 20pp. Illus. Booklet containing an article originally published in the Journal of the Japanese Society of Horticultural Science Vol. 30, No. 3, P.270-290, 1961.

This important study of *C. rusticana* is the result of four years exploration from April until June, in Niigata Prefecture, where the snow camellia grows wild and is also cultivated as an ornamental shrub near many dwelling houses. In the mountainous districts up to 1,400 metres above sea level the snow camellia is widely distributed, but lower on the plains it grows in association with *C. japonica*. It is interesting to note that the authors found intermediate types, no doubt the result of cross-fertilization between the two species. Details of the variation in flower and leaf characters in relation to district and the proximity of *C. japonica* are fully given by maps, graphs and in the text. Over six hundred different unnamed snow camellias were collected, many of which have great ornamental value. The coloured illustrations show the free flowering nature of *C. rusticana* and the variety of flower form and colour. The authors from the Faculty of Agriculture, Niigata University, must be congratulated for contributing so greatly to our knowledge of *C. rusticana*.

C. PUDDLE.

Yun Nan shan cha hua tu chih by Yu, T.T. and Feng Y.T., 45pp. Peking.

This illustrated and descriptive work in Chinese of twenty cultivars of *C. reticulata* in Yunnan appeared in 1958 but is still little known in camellia circles. One new cultivar is illustrated called 'Tung Tzu Mien' (translated 'Baby Face'). The Preface describes the shape, height, majesty, and variety of *C. reticulata* in Yunnan—"It blooms during the late winter and early spring which is the season when most plants are hibernating. It is equally suitable either as a pot-plant or as a plant in the ground, indoors or outdoors. Those who have travelled through Kunming or Tali will have retained a very deep impression of this camellia. During the period just before and after the lunar New Year (February or March), you are always certain to see a few pots of these flowers in full bloom, be it in a private courtyard, big or small, or a public or private garden. Everyone will be able to tell you, just as if they were speaking of their family treasures, very rich poetic names such as, this particular plant is called 'Sung Tzu Lin' or 'Pinecone Scale,' or that one is called 'Chui Hsin Shih Pa Pan' or 'Nine Heads and Eighteen Petals.'

In the larger temples there are always a few of these old flowering plants, the age of the tree being more than two or three hundred years, with several thousand bright, gay and colourful blossoms. During the New Year, friends present these flowers to each other. When girls get married camellias are used in wedding decorations.

As to the history of the cultivation of the camellia in Yunnan, it was quite common during the early period of the Ming Dynasty (1368-1628), when it had already been cultivated for more than five hundred years . . . In *Yun Nan shan cha hua tu chih*, Hsieh Chao-Shou of Chihan, stated that there were 72 kinds. Chang Teng-Mei of Yu (Honan Province) recorded in the same encyclopedia that the plant had ten distinguishing qualities and that there were a hundred poems written about it.

The varieties mentioned in this book can all be found in the Department of Botanical Research, Chinese Academy of Science, at Heh Lung Tan, Kunming."

E. G. WATERHOUSE.

TO BE REVIEWED :

How to grow and use Camellias (Revised Edition) Sunset Magazine. Lane Book Co., Menlo Park, California, U.S.A. \$1.95.

The Camellia Book, by John L. Threlkeld. Van Nostrand. \$7.75 (60/-).

The Rhododendron and Camellia Year Book. Royal Horticultural Society, London. 12/6 (\$2.00).

The American Camellia Yearbook, 1962-63. American Camellia Society, Tifton, Georgia.

Current Literature

This regular feature will be devoted to recording some of the more important camellia contributions appearing in botanical and horticultural publications. The Society will welcome any assistance to make these records as complete as possible.

Camellia Bulletin (Northern California Camellia Society).

May, 1962. Vol. 15, No. 3, P.5.

Camellia Fertilizing Experiments by Woodford F. Harrison.

Findings of the Society's Plant Experimental Committee Project into the use of dry and liquid fertilizers for camellias.

Camellia Journal (American Camellia Society).

July, 1962. Vol. 17, No. 3.

This issue is devoted to the glasshouse culture of camellias and contains twenty articles dealing with all aspects of glasshouse structure and cultural methods.

Camellia News (Australian Camellia Research Society).

June, 1962. No. 6, P.2.

Camellia sasanqua, by J. R. Fisher.

A review of the cultivars of *C. sasanqua* and allied species under Australian conditions.

September, 1962. No. 7, P.6.

Camellia rusticana—the snow camellia of Japan, by E. G. Waterhouse.

Observations concerning *C. rusticana* made by the author during his recent visit to Japan.

Camellia Review (Southern California Camellia Society).

May, 1962. Vol. 23, No. 6, P.23.

Best Blooms in Southern California, by Frank F. Reed.

An assessment based on the results of camellia shows and meeting competitions from 1956 until April, 1962.

Carolina Camellias (Southern Carolina Camellia Society).

Spring, 1962. Vol. XIII, No. 2, P.5.

Yellow camellia found in Georgia.

Note on new yellow seedling of *C. japonica* raised by Mr. and Mrs. Witman, Macon, Georgia. (See also P.45, July, 1962, *Camellia Journal*.)

Vol. XIII. No. 2, P.17. Foliar feeding highly efficient, by Mansfield Latimer.

Latest developments in this new field of plant nutrition.

Horticulture (Horticultural Hall, Boston 15, Mass., U.S.A.)

April, 1962. Vol. XXXX, No. 4, P.228.

Camellias are moving north, by Dr. Francis de Vos.

May, 1962. Vol. XXXX, No. 5, P.258.

Can Hardiness be bred into camellias? by Richard Thomson.

Both articles deal with successful culture of camellias under cold conditions and recommend cultivars suitable for these areas.

New Zealand Camellia Bulletin (New Zealand Camellia Society).

July, 1962. Vol. II, No. 6, P.13.

A Simple propagating box for the home gardener, by Miss P. M. Bates.

Details and management of a small propagating frame.

Many fine camellias have been introduced by McCaskill Gardens, 25 South Michillinda Avenue, Pasadena, California. Amongst their latest novelties are 'Adele Clairmont,' a double light pink, 'Richfield,' a large semi-double rose pink, and 'Samarkand,' an irregular semi-double red blotched with white. Miniatures are increasing in popularity and 'Amigo,' 'Demi-Tasse,' 'Snow Fairy' and 'Tiki' represent this group whilst there is also an interesting hybrid between *C. x williamsii* and *C. japonica* 'Avalon' with large semi-double rose pink flowers. From Nuccio's Nurseries, 3555 Chaney Trail, Altadena, California, comes a new *C. reticulata* seedling raised by J. Howard Asper. It has been named 'William Hertrich' in honour of Mr. William Hertrich, Curator Emeritus, Huntington Botanical Gardens. Also new to this beautifully produced catalogue are 'Grand Slam' red, semi-double to anemone-form, 'Kickoff,' an early flowering peony-form with pale pink flowers speckled and striped rose-red and 'Hit Parade,' a semi-double coral red. Kramer Bros., P.O. Box 158, Upland, California, have introduced 'Miss Universe,' a beautiful peony to rose-form white.

We are asked by Mrs. Ralph S. Peer to include the following notice:

"Mrs. Ralph S. Peer wishes to announce that Mr. John Sobeck is no longer connected with the Park Hill Camellia Gardens since August 1962. In his place we now have Mr. Basil Neptune. All exchanges of scions, information and experimental work is to be continued between all camellia enthusiasts wherever they may live. If you have had any past direct correspondence with Mr. Sobeck concerning camellias for Park Hill, we would very much appreciate a copy for our files."

Mr. J. Howard Asper, a Director of the Society, has resigned as Superintendent of the Huntington Botanic Gardens. He will now devote all his energies to his own business, Green Valley Nurseries, and hopes to have more time for camellia hybridisation. We wish him good fortune in his new venture.

By Way of Appreciation

DOROTHY W. NEWTON

Kent

United Kingdom

To Foster—

To Undertake—

To Co-operate—

To Disseminate—

To Encourage—

Here are the first five words of what I call the Charter of the International Camellia Society; they are words that sound like a fanfare, flutter like pennants over the pavilions of goodwill rather than the tents of warlike armies. I, a lover of the camellia and of all flowers, hail this Society born of a new age, with pleasure and also with a sense of uplift. So often societies are born and nurtured to fight against something, to oppose or destroy. Here, however, is something different: a society of flower-lovers — in particular the camellia — which, amazing though this may seem, is interested also in people.

Perhaps the third paragraph of the Charter appeals the most to me. *To co-operate with all national and regional Camellia Societies and with other Horticultural Societies.* Here we see goodwill spreading its wings indeed. For, to honour this, we must be both glad and willing to forego all racial prejudice, all ideological suspicions and all idea of separatism. Now, I can think of no other flower, no other shrub worthier of becoming the symbol for world-wide co-operation than the most gracious, most versatile and exquisite camellia. Just at this time its fame is growing in dimension, and we are discovering how easy and adaptable it is. It will grow almost anywhere, given the right soil and some shelter; and where the weather is too rigorous, it can still be grown in a sun-parlour, glass-house or conservatory. Even, it can be grown in one's home, provided we ourselves are conscientious indoor-gardeners, placing it in a cool, light and airy position, watering and feeding it regularly and generally giving it love and tender care.

May this splendid idea—embodied in our Society—add its quota, by the way of a mutual delight in camellias, to world peace and a greater understanding of our fellows, proving a "United Nations" of flower-lovers (for lovers of the camellia also delight in flowers in general—they cannot help it!) and at the same time introducing many more of us to the whole exciting race of camellias, many coloured, vari-petalled and so astonishingly beautiful in flower and in leafage.

TWO HISTORICAL EXTRACTS

"The camellia is an aristocratic flower. All the princes and princesses of Orléans had a camellia named after them: the Duc d'Orléans (1838); Madame Adélaïde, sister of Louis-Phillipe, 'who found her whole happiness in growing a small plot of flowers at Neuilly' (about 1842); and the Duchesse d'Orléans, to whom, after the tragic death of the Duke, a camellia was dedicated, to 'the august Princess who by her resignation in grief and her conjugal piety has acquired the respectful admiration of the world.' The 'Comte de Paris' and the 'Duc de Chartres' camellias were bred from the 'Duc d'Orléans' camellia in 1852. Louise received the 'Reine des Belges' camellia in 1849, the Duchesse de Nemours had had hers in 1841, and the Duc d'Aumale was to have his in 1851. There is also a camellia called 'Duchesse de Montpensier.' But in all the many publications devoted to the camellia at that time, when it was the rage, I have found no trace of the 'Reine des Français' camellia. The *Revue Horticole* of 1846 reveals that, when the Queen visited the winter garden of M. Lemichez in Paris, another camellia called 'Marie-Amélie' was dedicated to her."

Reprinted by permission from *A Gallery of Flowers* by Germain Bazin, published by Thames & Hudson, London, at 35/-.

The passage referred to above in the *Revue Horticole* 1846 P. 28 reads as follows:

The Queen's visit to the winter gardens of Mr. Lemichez.

"Mr. Lemichez, proprietor of the winter gardens situated in la rue des Trois-Couronnes, lately received an honour which is shared in part by all horticulturalists. The Queen and Princess Adélaïde visited his gardens, and during a stay of an hour and a half thoroughly enjoyed all its interesting features.

The two noble ladies expressed to Mr. Lemichez the great pleasure they had received viewing the beautiful exhibits in his garden. Indeed the infinite variety of exquisite camellias, azaleas, rhododendrons which constituted the major part of his cultures, was worthy of the highest praise, but outstanding above the whole selection perhaps was the magnificent show of orange trees in espalier form, displaying at the same time their beautiful blossoms and brilliant fruit.

A superb camellia grown from seed sown by Mr. Fion, Mr. Lemichez's predecessor, was flowering for the first time. It was recognised as one of the most beautiful varieties of this beautiful flower. In the centre of the bloom, a ring of petals gave the impression of a crown. Such an outstanding exhibit merited an outstanding name and by general acclamation it was given the title of 'Marie-Amélie.' The Queen with her usual graciousness, accepted the compliment with evident pleasure.

We warmly welcome this action by the Queen, as Mr. Lemichez is one of the cleverest and yet most modest of horticulturalists and worthy of the highest distinction.

To commemorate this occasion and at the same time to show her appreciation of his great work, she sent Mr. Lemichez a gold medal, bearing on one side in relief the head of the King and Queen and on the other the inscription "To Mr. Lemichez from the Queen, 7th March, 1846."

We hope this royal visit will not be the last and that other worthy horticultural establishments will receive similar honours. Such action would be looked upon by their proprietors as the highest reward for their labours."

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The International Camellia Society has been inaugurated with the following motives:—

- To foster the love of camellias throughout the world and to maintain and increase their popularity.
- To undertake historical, scientific and horticultural research in connection with camellias.
- To co-operate with all national and regional camellia societies and with other horticultural societies.
- To disseminate information concerning camellias by means of bulletins and other publications.
- To encourage a friendly exchange between camellia enthusiasts of all nationalities.

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